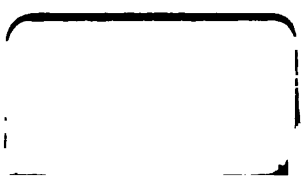


WATER-POWER BILL

HEARING

BEFORE THE

COMMITTEE ON PUBLIC LANDS UNITED STATES SENATE

SIXTY-THIRD CONGRESS
THIRD SESSION

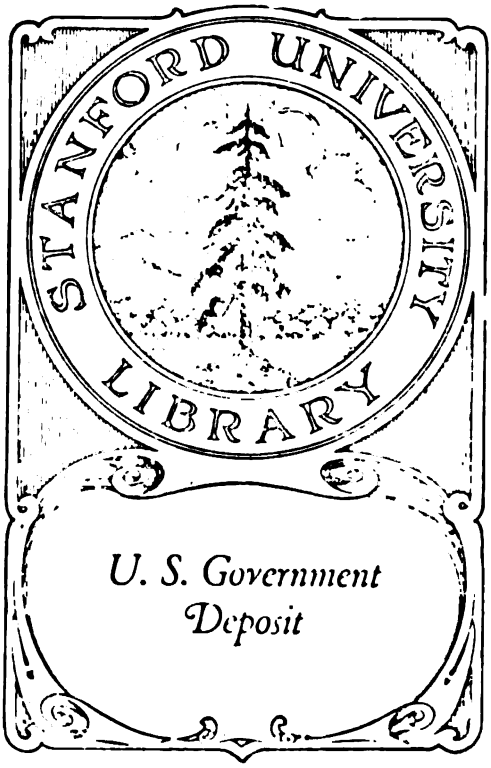
ON

H. R. 16673

AN ACT TO PROVIDE FOR THE DEVELOPMENT OF WATER POWER AND THE USE OF PUBLIC LANDS IN RELATION THERETO, AND FOR OTHER PURPOSES

Printed for the use of the Committee on Public Lands

WASHINGTON
GOVERNMENT PRINTING OFFICE
1913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COMMITTEE ON PUBLIC LANDS.

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CHARLES W. DRAPER, *Clerk.*

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WATER-POWER BILL.

WEDNESDAY, DECEMBER 9, 1914.

UNITED STATES SENATE,
COMMITTEE ON PUBLIC LANDS,
Washington, D. C.

The committee met at 10.30 o'clock a m., pursuant to the call of the chairman.

Present: Senators Myers (chairman), Smith of Arizona, Robinson, Thompson, Smoot, Clark of Wyoming, Works, Norris, and Sterling.

Present also Senators Shafroth, Walsh, and Jones.

Present also Hon. George Otis Smith, Director United States Geological Survey; Mr. Edward C. Finney, assistant attorney, Department of the Interior; and Messrs. G. W. Bacon, W. A. Breckenridge, John A. Britton, Clarence M. Clark, John H. Finney, H. J. Pierce, Frank A. Short, S. M. Stackslager, G. C. Ward, and P. P. Wells.

The CHAIRMAN. The committee will come to order.

We are here by order of the committee heretofore made to have hearings on House bill 16673, an act to provide for the development of water power and the use of public lands in relation thereto, and for other purposes.

I suggest that the clerk of the committee have the bill embodied in the printed hearings at the beginning, so that it may appear before the testimony. If there is no objection, that will be done. The clerk will have the bill embodied in the hearings at the opening thereof.

(The bill is as follows:)

AN ACT To provide for the development of water power and the use of public lands in relation thereto, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior be, and hereby is, authorized and empowered, under general regulations to be fixed by him, and under such terms and conditions as he may prescribe, not inconsistent with the terms of this act, to lease to citizens of the United States, or to any association of such persons, or to any corporation organized under the laws of the United States, or any State or Territory thereof, any part of the public lands of the United States (including Alaska), reserved or unreserved, excluding lands in national forests, the Grand Canyon and Mount Olympus national monuments, and other reservations, not including national parks or military reservations, for a period not longer than fifty years, for the purpose of constructing, maintaining, and operating dams, water conduits, reservoirs, power houses, transmission lines, and other works necessary or convenient to the development, generation, transmission, and utilization of hydroelectric power which leases shall be irrevocable except as herein provided, but which may be declared null and void upon breach of any of their terms: *Provided*, That such leases shall be given within or through any of said national forests

or other reservations only upon a finding by the chief officer of the department under whose supervision such forest, national monument, or reservation f. that the lease will not injure, destroy, or be inconsistent with the purpose f which such forest, national monument, or reservation was created or acquire *Provided further*, That in the granting of leases under this act the Secretary the Interior may, in his discretion, give preference to applications for le for the development of electrical power by States, counties, or municipalitie or for municipal uses and purposes: *Provided further*, That for the purpose enabling applicants for a lease to secure the data required in connection ther with the Secretary of the Interior may, under general regulations to be issue by him, grant preliminary permits authorizing the occupation of lands valu ble for water-power development for a period not exceeding one year in any case which time may, however, upon application be extended by the Secretary o the Interior if the completion of the application for lease has been prevented by unusual weather conditions or by some special or peculiar cause beyond the control of the permittee.

SEC. 2. That each lease made in pursuance of this act shall provide for the diligent, orderly, and reasonable development and continuous operation of the water power, subject to market conditions, and shall provide that the lessee shall at no time contract for the delivery to any one consumer of electrical energy in excess of fifty per centum of the total output.

SEC. 3. That in case of the development, generation, transmission, and use of power or energy under such a lease in a Territory, or in two or more States, the regulation and control of service and of charges for service to consumers and of the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior or committed to such body as may be provided by Federal statute: *Provided*, That the physical combination of plants or lines for the generation, distribution, and use of power or energy under this act or under leases given hereunder may be permitted, in the discretion of the Secretary of the Interior, but combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade with foreign nations or between two or more States or within any one State, or to fix, maintain, or increase prices for electrical energy or service are hereby forbidden.

SEC. 4. That except upon the written consent of the Secretary of the Interior no sale or delivery of power shall be made to a distributing company, except in case of an emergency and then only for a period not exceeding thirty days, nor shall any lease issued under this act be assignable or transferable without such written consent: *Provided, however*, That no lessee under this act shall create any lien upon any power project developed under a permit issued under this act by mortgage or trust deed, except approved by the Secretary of the Interior and for the bona fide purpose of financing the business of the lessee. Any successor or assign of such property or project, whether by voluntary transfer, judicial sale, foreclosure sale, or otherwise, shall be subject to all the conditions of the approval under which such rights are held, and also subject to all the provisions and conditions of this act to the same extent as though such successor or assign were the original lessee hereunder.

SEC. 5. That upon not less than three years' notice, which may be issued at any time after three years immediately prior to the expiration of any lease under this act, the United States shall have the right to take over the properties which are dependent, in whole or in part, for their usefulness on the continuance of the lease herein provided for, and which may have been acquired by any lessee acting under the provisions of this act, upon condition that it shall pay, before taking possession first, the actual costs of rights of way, water rights, lands, and interests therein purchased and used by the lessee in the generation and distribution of electrical energy under the lease, and, second, the reasonable value of all other property taken over, including structures and fixtures acquired, erected, or placed upon the lands and included in the generation or distribution plant, and which are dependent as hereinabove set forth, such reasonable value to be determined by mutual agreement between the Secretary of the Interior and the lessee, and, in case they can not agree, by proceedings instituted in the United States district court for that purpose: *Provided*, That such reasonable value shall not include or be affected by the value of the franchise or good will or profits to be earned on pending contracts or any other intangible element.

SEC. 6. That in the event the United States does not exercise its right to take over, maintain, and operate the properties as provided in section five hereof, or does not renew the lease to the original lessee upon such terms and conditions and for such periods as may be authorized under the then existing applicable

[illegible] the Secretary of the Interior is authorized, upon the expiration of any lease under this act, to lease the properties of the original lessee to a new [illegible] upon such terms, under such conditions, and for such periods as applicable [illegible] may then authorize, and upon the further condition that the new [illegible] shall pay for the properties as provided in section five of this act.

SEC. 7. That where, in the judgment of the Secretary of the Interior, the [illegible] interest requires or justifies the execution by any lessee of contracts for [illegible] sale and delivery of electrical energy for periods extending beyond the life [illegible] the lease, but for not more than twenty years thereafter, such contracts may be entered into upon the approval of the said Secretary, and thereafter, in the event of the exercise by the United States of the option to take over the [illegible] in the manner provided in sections five or six hereof, the United States or the new lessee shall assume and fulfill all such contracts entered into by the first lessee.

SEC. 8. That for the occupancy and use of lands and other property of the United States permitted under this act the Secretary of the Interior is authorized to specify in the lease and to collect charges or rentals for all power developed and sold or used by the lessee for any purpose other than the operation of the plant, and the proceeds shall be paid into, reserved, and appropriated as a part of the reclamation fund created by the act of Congress approved June seventeenth, nineteen hundred and two, known as the reclamation act, and after use thereof in the construction of reclamation works and upon return to the reclamation fund of any such moneys in the manner provided by the reclamation act and acts amendatory thereof and supplemental thereto, fifty per centum of the amounts so utilized in and returned to the reclamation fund shall be paid by the Secretary of the Treasury after the expiration of each fiscal year to the State within the boundaries of which the hydroelectric power or energy is generated and developed, said moneys to be used by such State for the support of public schools or other educational institutions or for the reconstruction of public improvements, or both, as the legislature of the State may direct: *Provided*, That leases for the development of power by municipal corporations solely for municipal use shall be issued without rental charge, and that leases for development of power not in excess of twenty-five horsepower may be issued to individuals or associations for domestic, mining, or irrigation use without such charge.

SEC. 9. That in case of the development, generation, transmission, or use of power or energy under a lease given under this act in a State which has not provided a commission or other authority having power to regulate rates and service of electrical energy and the issuance of stock and bonds by public-utility corporations engaged in power development, transmission, and distribution, the control of service and of charges for service to consumers and stock and bond issues shall be vested in the Secretary of the Interior or committed to such body as may be authorized by Federal statute until such time as the State shall provide a commission or other authority for such regulation and control.

SEC. 10. That where the Secretary of the Interior shall determine that the value of any lands, heretofore or hereafter reserved as water-power sites or for purposes in connection with water-power development or electrical transmission, will not be materially injured for such purposes by either location, entry, or disposal, the same may be allowed under applicable land laws upon the express condition that all such locations, entries, or other methods of disposal shall be subject to the sole right of the United States and its authorized lessees to enter upon, occupy, and use any part or all of such lands reasonably necessary for the accomplishment of all purposes connected with the development, generation, transmission, or utilization of power or energy, and all rights acquired in such lands shall be subject to a reservation of such sole right to the United States and its lessees, which reservation shall be expressed in the patent or other evidence of title: *Provided*, That locations, entries, selections, or filings heretofore allowed for lands reserved as water-power sites or in connection with water-power development or electrical transmission may proceed to approval or patent under and subject to the limitations and conditions in this section contained, but nothing herein shall be construed to deny or abridge rights now granted by law to those seeking to use the public lands for purposes of irrigation or mining alone.

SEC. 11. That the Secretary of the Interior is hereby authorized to examine books and accounts of lessees, and to require them to submit statements, representations, or reports, including information as to cost of water rights, lands,

or other reservations only upon a finding by the chief officer of the department under whose supervision such forest, national monument, or reservation falls that the lease will not injure, destroy, or be inconsistent with the purpose for which such forest, national monument, or reservation was created or acquired: *Provided further*, That in the granting of leases under this act the Secretary of the Interior may, in his discretion, give preference to applications for leases for the development of electrical power by States, counties, or municipalities, or for municipal uses and purposes: *Provided further*, That for the purpose of enabling applicants for a lease to secure the data required in connection therewith the Secretary of the Interior may, under general regulations to be issued by him, grant preliminary permits authorizing the occupation of lands valuable for water-power development for a period not exceeding one year in any case, which time may, however, upon application be extended by the Secretary of the Interior if the completion of the application for lease has been prevented by unusual weather conditions or by some special or peculiar cause beyond the control of the permittee.

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SEC. 5. That upon not less than three years' notice, which may be issued at any time after three years immediately prior to the expiration of any lease under this act, the United States shall have the right to take over the properties which are dependent, in whole or in part, for their usefulness on the continuance of the lease herein provided for, and which may have been acquired by any lessee acting under the provisions of this act, upon condition that it shall pay, before taking possession, first, the actual costs of rights of way, water rights, lands, and interests therein purchased and used by the lessee in the generation and distribution of electrical energy under the lease, and, second, the reasonable value of all other property taken over, including structures and fixtures acquired, erected, or placed upon the lands and included in the generation or distribution plant, and which are dependent as hereinabove set forth, such reasonable value to be determined by mutual agreement between the Secretary of the Interior and the lessee, and, in case they can not agree, by proceedings instituted in the United States district court for that purpose: *Provided*, That such reasonable value shall not include or be affected by the value of the franchise or good will or profits to be earned on pending contracts or any other intangible element.

SEC. 6. That in the event the United States does not exercise its right to take over, maintain, and operate the properties as provided in section five hereof, or does not renew the lease to the original lessee upon such terms and conditions and for such periods as may be authorized under the then existing applicable

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SEC. 8. That for the occupancy and use of lands and other property of the United States permitted under this act the Secretary of the Interior is authorized to specify in the lease and to collect charges or rentals for all power [illegible] used and sold or used by the lessee for any purpose other than the operation of the plant, and the proceeds shall be paid into, reserved, and appropriated as a part of the reclamation fund created by the act of Congress approved June seventeenth, nineteen hundred and two, known as the reclamation act, and after use thereof in the construction of reclamation works and upon return to the reclamation fund of any such moneys in the manner provided by the reclamation act and acts amendatory thereof and supplemental thereto, fifty per cent of the amounts so utilized in and returned to the reclamation fund shall be paid by the Secretary of the Treasury after the expiration of each fiscal year to the State within the boundaries of which the hydroelectric power or energy is generated and developed, said moneys to be used by such State for the support of public schools or other educational institutions or for the construction of public improvements, or both, as the legislature of the State may direct: *Provided*, That leases for the development of power by municipal corporations solely for municipal use shall be issued without rental charge, and that leases for development of power not in excess of twenty-five horsepower may be issued to individuals or associations for domestic, mining, or irrigation use without such charge.

SEC. 9. That in case of the development, generation, transmission, or use of power or energy under a lease given under this act in a State which has not provided a commission or other authority having power to regulate rates and service of electrical energy and the issuance of stock and bonds by public-utility corporations engaged in power development, transmission, and distribution, the control of service and of charges for service to consumers and stock and bond issues shall be vested in the Secretary of the Interior or committed to such body as may be authorized by Federal statute until such time as the State shall provide a commission or other authority for such regulation and control.

SEC. 10. That where the Secretary of the Interior shall determine that the use of any lands, heretofore or hereafter reserved as water-power sites or for purposes in connection with water-power development or electrical transmission, will not be materially injured for such purposes by either location, entry, or disposal, the same may be allowed under applicable land laws upon the express condition that all such locations, entries, or other methods of disposal shall be subject to the sole right of the United States and its authorized lessees to enter upon, occupy, and use any part or all of such lands reasonably necessary for the accomplishment of all purposes connected with the development, generation, transmission, or utilization of power or energy, and all rights acquired in such lands shall be subject to a reservation of such sole right to the United States and its lessees, which reservation shall be expressed in the patent or other evidence of title: *Provided*, That locations, entries, selections, or filings heretofore allowed for lands reserved as water-power sites or for use in connection with water-power development or electrical transmission may be perfected to approval or patent under and subject to the limitations and conditions in this section contained, but nothing herein shall be construed to deny to bridge rights now granted by law to those seeking to use the public lands for purposes of irrigation or mining alone.

SEC. 11. That the Secretary of the Interior is hereby authorized to examine books and accounts of lessees, and to require them to submit statements, representations, or reports, including information as to cost of water rights, lands,

easements, and other property acquired, production, use, distribution, and sale of energy, all of which statements, representations, or reports so required shall be upon oath, unless otherwise specified, and in such form and upon such blanks as the Secretary of the Interior may require; and any person making any false statement, representation, or report under oath shall be subject to punishment as for perjury.

SEC. 12. That any such lease may be forfeited and canceled, by appropriate proceedings, in a court of competent jurisdiction whenever the lessee, after reasonable notice, in writing, as prescribed in the lease, shall fail to comply with the terms of this act or with such conditions not inconsistent herewith as may be specifically recited in the lease.

SEC. 13. That the Secretary of the Interior is hereby authorized to perform any and all acts and to make such rules and regulations as may be necessary and proper for the purpose of carrying the provisions of this act into full force and effect.

SEC. 14. That nothing in this act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State relating to the control, appropriation, use, or distribution of water.

SEC. 15. That all acts or parts of acts providing for the use of the lands of the United States for any of the purposes to which this act is applicable are hereby repealed to the extent only of any conflict with this act: *Provided, however*, That the provisions of the act of February fifteenth, nineteen hundred and one (Thirty-first Statutes at Large, page seven hundred and ninety), shall continue in full force and effect as to lands within the Yosemite, Sequoia, and General Grant National Parks in the State of California: *And provided further*, That the provisions of this act shall not be construed as revoking or affecting any permits or valid, existing rights of way heretofore given or granted pursuant to law, but at the option of the permittee any permit heretofore given for the development, generation, transmission, or utilization of hydroelectric power may be surrendered and the permittee given a lease for the same premises under the provisions of this act.

SEC. 16. That this act shall not apply to navigation dams or structures under the jurisdiction of the Secretary of War or Chief of Engineers, or to lands purchased or acquired by condemnation by the United States, or withdrawn by the President under the act approved June twenty-fifth, nineteen hundred and ten, entitled "An act to authorize the President of the United States to make withdrawals of public lands in certain cases" where such lands are purchased, acquired by condemnation, or withdrawn by the President for the sole purpose of promoting navigation.

Passed the House of Representatives August 24, 1914.

Attest: SOUTH TRIMBLE, *Clerk*.

The CHAIRMAN. Now, to get at the matter systematically, I would like to know who is present and desires to be heard this morning, and then I will consult with them about when such one desires to be heard, and about how long. I would like to have the gentlemen who are present give me their names and to indicate when and how long they desire to be heard.

Senator SMOOT. Mr. Chairman, before we begin to parcel out the time as to when certain people should speak, it seems to me we ought to have some kind of a program as to how we are going to proceed with the consideration of the bill. In my opinion it seems to me that the advocates of the bill should first make their statement as to what is their understanding of its provisions and why the bill should be passed.

The CHAIRMAN. I think that would be desirable.

Senator SMOOT. I think that somebody representing the Department of the Interior ought to make the opening statement.

The CHAIRMAN. Mr. Finney will be first. I just wanted to get a list of those present who desire to be heard to know how many there would be and how many days it would take.

Senator SHAFROTH. Mr. Chairman, when in Denver, Gov. Ammons, of Colorado, stated that he wanted to be heard on both of

...e bills, and that the governor elect, Charles A. Carlson, would ... like to be heard. I would like to have the committee indicate at ...t time they will hear them so that I can communicate with them.

The CHAIRMAN. I apprehend that the committee will be able to ...r them at any time that they might be here. We have another ...aring set for next week.

Senator SHAFROTH. They want to be heard on both of the bills.

Senator SMOOT. Suppose you wire them to come on next Monday ... as soon thereafter as possible, and then they can be heard on both ...

The CHAIRMAN. Yes; and then we can hear them when it is con...ent.

Senator JONES. Mr. Chairman, I introduced Senate bill No. 6712, ...think it is, and that I would like to have heard in connection with ... House bill, because it covers the same subject; and I would like ...have it printed along with the hearings, as it is with reference ... the House bill, and I will probably want an opportunity to be ...d briefly in reference to my bill.

The CHAIRMAN. Is there any objection to considering both bills at ... same time?

There being no objection, it will be done, and both bills will be ...ted in the record as being considered jointly.

The bill referred to is as follows:)

...L To aid and to regulate the development, operation, and maintenance of water ...wers on lands of the United States, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United ...tes of America in Congress assembled, That in order to utilize for the benefit ... the public the water-power resources dependent in whole or in part for their ...development upon the use of public lands of the United States (including ... and in order to prevent the unregulated monopoly of said water ...ers, and for the purpose of developing, generating, transmitting, and utilizing ...electric power, the right to construct, develop, maintain, and operate dams, ...reservoirs, canals, conduits, pipe lines, tunnels, water-power or hydroelectric ...transmission and distributing lines, and all other appurtenant construc...structures, and appliances necessary or convenient for the development, ...tion, transmission, and utilization of hydroelectric power on, over, under, ...any part of the public lands of the United States (including Alaska), ...ed or unreserved, including national forests, national monuments, and ...n reservations, is hereby granted, upon compliance with the conditions here...er imposed, to any State or municipal subdivision thereof or to any mutual ...public-service corporation organized for the purpose, or to any person or ...authorized by the State or States in which any portion of such dam, ...reservoir, water-power or hydroelectric plant, or transmission or dis...ributing lines may be located, to engage in the business of furnishing water ...domestic uses, irrigation, transportation, or any other purposes, or light, ...power, or energy, generated by electricity or otherwise: *Provided*, That ...in which such lands may be located shall have provided for the regula...and control of mutual and public-service corporations and persons engaging ...such business. Such State, municipal subdivision, mutual or public-service ...ration, person or persons is hereinafter referred to as the "grantee."

... 2. That any grantee hereunder may construct, develop, maintain, and ...dams, reservoirs, canals, conduits, pipe lines, tunnels, water-power or ...electric plants, transmission and distributing lines, and all other ap...nt structures and appliances on, over, under, and across any part of the ...lands of the United States (including Alaska), reserved or unreserved, ...including national forests, national monuments, and Indian reservations, upon ...with the Secretary of the department having jurisdiction over such lands ...of its right to the use of water and plans and specifications for such ...together with such drawings of the proposed construction and such map ...proposed location and flooded areas as may be required for a full under-

standing of the subject, which plans, specifications, and drawings shall be approved by such Secretary if it appears to him that the proposed development will promote the highest and greatest practicable use of the water resources involved. Within ninety days after the approval of such plans, specifications, and drawings said grantee and such Secretary shall agree upon the then fair market value of the lands proposed to be occupied which are owned or controlled by the United States, and in the event of their failure to agree within such time, then such grantee shall have the right to, and may, begin proceedings in the district court of the United States for the district in which such lands or any part thereof may be located for the purpose of determining the then fair market value thereof. Such district court is hereby given jurisdiction of said proceedings for such purpose, and service of process may be had upon the clerk of said court, and upon such service being made the Attorney General of the United States shall enter his appearance for the United States. Such proceedings shall be conducted according to the laws and rules in force in said jurisdiction at said time for the exercise of the right of eminent domain for public purposes, with the right of appeal as in other cases. Upon an agreement being reached as to the fair market value of said land between said Secretary and the grantee, or in the event of their failure to agree, then upon the final adjudication of the value of said land the grantee shall have the right to occupy the same for the purposes above set forth for a period of fifty years after such agreement or final adjudication, and after the expiration of said period of fifty years such right shall continue until terminated and compensation has been made to the grantee for the fair value of its property, as herein provided. During the occupancy of said land by the grantee it shall pay into the Treasury of the United States annually, in advance, a sum equal to five per centum upon the fair market value of such land as so determined by agreement or final adjudication, and the liability for such payment shall constitute a preferred claim against all the assets of the grantee and may be collected by suit brought in the name of the United States, and in the event of the failure of the grantee to pay any judgment and costs recovered in such suit, then such judgment may provide for ejecting said grantee from said premises and for the forfeiture of the grant.

SEC. 3. That in the acquisition of the property of the grantee, as hereinafter provided, no value shall be claimed by or allowed to the grantee for the use of or the right to use the lands acquired under the terms of this act.

SEC. 4. That where the public interest requires or justifies the execution by the grantee of contracts for the sale and delivery of electrical energy for periods extending beyond the fifty-year period herein named, such contracts may be entered into upon the approval of the Public Service Commission or similar authority in the State in which the sale or delivery of power is made, or if sold or delivered in a Territory, then upon the approval of the authority under which the grant is made, and thereafter, in the event of the termination of the grant as herein provided, the United States or any subsequent grantee shall assume and fulfill all such contracts entered into by the original grantee.

SEC. 5. That Congress may, at any time, provide for the termination of the right to occupy such land upon the expiration of said fifty-year period, or at any time thereafter, and provide for the disposition of all the property of the grantee dependent for its success upon the rights hereby granted, which shall include the necessary appurtenant property created or acquired and valuable or serviceable in the distribution of water or in the generation, transmission, or distribution of light, heat, power, or energy, upon the payment of fair compensation and upon the assumption of all contracts entered into by said grantee which have the approval of the duly constituted public authority having jurisdiction thereof.

SEC. 6. That in order to prevent tying up, for speculative purposes, any of the lands to be acquired under this act, the grantee shall commence the construction of the project within two years from the date of the agreement, or in the event of failure to agree then upon the date of final adjudication, as to the value of the land to be occupied, and shall thereafter, in good faith, continuously, and with due diligence, prosecute such construction, and shall within the further term of five years complete and put in commercial operation such part of the ultimate development as the Secretary or Secretaries of the department or departments then having jurisdiction over such lands shall deem necessary to supply the reasonable needs of the then available market, and shall from time to time thereafter construct such portion of the balance of such ultimate development as said Secretary or Secretaries may direct and within

the time specified by said Secretary or Secretaries, so as to supply adequately the reasonable market demands until such ultimate development shall be completed, and no extensions of the periods herein specified shall be granted except by the President, and then only when, in his judgment, the public interest will be promoted thereby.

SEC. 7. That rates charged by all grantees under this act shall be reasonable and the service and operation shall be adequate and efficient and all such grantees shall be subject to lawful regulation in the public interest as to rates otherwise by the respective States having jurisdiction thereof: *Provided, however*, That the United States reserves the right to regulate rates and service to the extent that the business of the grantee may be or shall become interstate.

SEC. 8. That the provisions of this act shall apply to all grantees herein designated who, under existing laws or by the terms of an agreement or agreements heretofore entered into with the Department of the Interior or the Department of Agriculture, may have constructed, or have under construction, dams, reservoirs, canals, conduits, pipe lines, tunnels, water-power or hydroelectric plants, transmission or distributing lines, and appurtenant structures and appliances on, over, under, or across any part of the public lands of the United States, reserved or unreserved as defined in section one of this act, and said grantee shall have the right to have the then fair market value of the lands occupied and used determined, as in said section two provided, and shall thereupon be entitled to all the rights, privileges, and benefits of this act, and subject to its terms and provisions. Upon a determination of the fair market value of said land, by and between the Secretary of the department having jurisdiction over such lands and the grantee, or, in the event of their failure thereto, then upon the final adjudication of the value of said lands, as provided in section two of this act, and upon such modification of its plans and specifications for development as the Secretary may deem necessary to promote by the proposed development the highest and greatest practical use of the water resources involved such grantee shall have the right to ask, demand, and receive the cancellation of any and all agreements theretofore made with the Department of the Interior or the Department of Agriculture having reference to any of the rights of way or lands of the United States so occupied or used, and to the payment by said grantee into the Treasury of the United States of the proper annual payment for the use of said lands, as herein provided, all such instrument or agreements shall be canceled and annulled and be of no further force or effect.

SEC. 9. That all water-power reserves may be opened by the President to location, settlement, entry, and disposal under the appropriate public-land laws, so far as the same will not impair, prejudice, or destroy the use of the land for water-power development, generation, transmission, or utilization, it being the purpose of this section that so far as possible lands available and necessary for water power and for other purposes shall be used for all purposes, the water power however, being the dominant use, which reservation shall be expressed in all patents issued for such land.

SEC. 10. That the works constructed and maintained under authority of this act shall not be owned, leased, trusteed, possessed, or controlled by any device or in any manner so that they form a part of or in any way affect any combination in the form of an unlawful trust, or form the subject of any contract or conspiracy to limit the output of electric energy or in restraint of trade with foreign nations or between two or more States or Territories in the generation, transmission, or distribution of electric energy..

SEC. 11. That any grant made hereunder may be forfeited and canceled before the expiration of the 50-year period herein named, by appropriate proceedings in a court of competent jurisdiction, whenever the grantee shall fail to comply with the terms of this act.

SEC. 12. That the Secretary having control and jurisdiction over any lands subject to the provisions of this act may make such rules and regulations as may be necessary and proper for the purpose of carrying out the provisions of this act in relation to the lands under his control and jurisdiction.

SEC. 13. That the provisions of section one of this act defining the qualifications necessary for a grantee hereunder shall not apply to any water-power developments or proposals for development of a capacity of one thousand horsepower or less, and in such cases the benefits of this act shall extend to any person, corporation, or association of persons which shall comply with the other terms and requirements hereof

SEC. 14. That all acts and parts of acts inconsistent with this act are hereby repealed, and the right to alter, amend, or repeal this act is hereby expressly reserved: *Provided*, That in case any grantee hereunder shall, at the time of such alteration, amendment, or repeal, have exercised rights in accordance with this act, such rights and property used thereunder shall be deemed property rights of such grantee, of which such grantee shall not until the time herein fixed for termination be deprived by such alteration, amendment, or repeal, and then only upon the conditions provided in case of termination by section [illegible] of this act.

Senator CLARK. My colleague, Mr. Mondell, has an interest in both of these bills and desires to be heard, but he can be here at any time.

The CHAIRMAN. We would be glad to have him here at any time.

Senator CLARK. He probably would like to discuss it at some length, as he was not before the House committee.

Senator SMOOT. I shall wire Gov. Spry, of Utah, to come here as soon as possible.

The CHAIRMAN. I think it would be proper, if it meets with the approval of the committee, to have Mr. Finney and Mr. Smith, whom I see present, make statements of their views in behalf of the Interior Department and say what they have to say in support of the bill in the opening. If there is no objection, we will pursue that course. We will hear Mr. Finney first. Whatever you have to say in behalf of the bill, Mr. Finney, we will be glad to hear.

STATEMENT OF MR. EDWARD C. FINNEY, ASSISTANT ATTORNEY, DEPARTMENT OF THE INTERIOR.

Mr. FINNEY. Mr. Chairman, for the past six or seven years the department has realized that the present laws relating to the development of water power were ill adapted to secure that development from the standpoint of the would-be developer and investor. We have had numerous oral and written communications from power companies, and those who have invested their money in these enterprises, and others, urging the preparation of some legislation to cover the situation.

As you are aware, a number of bills have been presented at the various sessions of Congress. Last year Secretary Lane took the matter up and held conferences with the representatives of the various interests, and some members of this committee and members of the House committee, and as a result a tentative measure was prepared and was introduced in the House, being No. 14893. That bill was the subject of an extensive hearing before the Committee on Public Lands of the House in April and May, 1914. After those hearings the House Committee on Public Lands reported out the measure which bears the number 16673, and which was passed by the House on August 24, 1914, and is now pending before the Senate.

Senator SMOOT. Is that substantially the same as the bill on which the hearings were had?

Mr. FINNEY. Yes, sir; it is along the same general line as No. 14893, with some amendments and changes suggested at the hearings and others made on the floor of the House. The general thought and purpose of the bill is the same.

Senator SMOOT. Mr. Finney, have you in mind the amendments that were offered? If so, I would like to have you state those amendments and also the reasons for them. I have read the hearings

pretty carefully and I have not had time to compare the two bills. I thought perhaps you could do that in a very short time and save considerable work.

Mr. FINNEY. I could give you all the amendments that were offered before the committee of the House, but those that were offered on the floor of the House I am not so sure of. I might undertake to do.

Senator SMOOT. That would be sufficient, I think, and it would help the committee greatly, because if you do not do it now in your statement we will have to compare them ourselves.

Mr. FINNEY. The bill as passed by the House meets with the approval of Secretary Lane, and he believes that it should be enacted into law and that it will insure the development of electrical resources on the public domain and safeguard the public interests.

The main features of this bill are, first, the proposition to lease or grant the use of public lands in reservations for periods not exceeding 50 years by individuals or corporations for the construction of power sites and the utilization of power.

Senator CLARK. Right on that point, Mr. Finney, may I just make one inquiry? Is there anything in the bill anywhere which provides the conditions under which, those conditions being complied with, there is an absolute certainty that the person can secure the privilege which the Secretary of the Interior is authorized to grant?

Mr. FINNEY. Whether, if a person applies for a permit to develop, he is absolutely entitled to have his application approved by the department?

Senator CLARK. Yes, sir; after he has complied with the terms of the law and with all rules and regulations.

Mr FINNEY. No, sir; it is not at the present time mandatory on the Secretary of the Interior.

Senator CLARK. Do you not think something of that sort ought to be done where, if, under regulations made by the department, certain conditions, specified conditions, are complied with, that is, if the party complies with all those conditions, it ought then to be mandatory on the Secretary of the Interior, as a matter of course, to grant the permit?

Mr. FINNEY. I think, generally speaking, just as in the case of a homestead entry or any other entry of public lands, the first qualified entryman who is willing to comply with the law should be given the right to get the property.

Senator CLARK. Do you not think that something ought to be embodied in the bill providing for that?

Mr. FINNEY. From a departmental standpoint I do not think it necessary, because I think that would be undoubtedly the case. I do not think any Secretary of the Interior would arbitrarily discriminate between two corporations or between individuals.

Senator CLARK. Well, I understand that this bill is for the purpose of hastening the development of water power, and under such conditions as the Secretary of the Interior, in his wisdom, in connection with what is provided in the bill, provides. We all know, I think, we may as well face the fact at the beginning of this inquiry as anywhere else, that there is complaint—I am not saying that it is founded on fact or anything of that sort—but there is complaint

that it is almost impossible to do anything in regard to the open up of any of these resources. Inasmuch as we all believe that Secretary of the Interior would not make any discrimination, do y not believe that it would be a wise policy to insert in this bill som where an absolute right for the applicant, in case he complies w all the rules and regulations and is eligible, to secure that right

Mr. FINNEY. That, perhaps, would not be objectionable if it w safeguarded by giving to the department some authority to tu down applications of those who are not qualified and those seeki to create a monopoly.

Senator CLARK. I think that is already covered here.

Mr. FINNEY. Possibly.

Senator SMOOT. I think that is covered in another section.

Let me call your attention to the proviso found on page 2 of t bill, beginning on line 18, in connection with what the Senator fro Wyoming has just stated:

Provided further, That for the purpose of enabling applicants for a lease t secure the data required in connection therewith, the Secretary of the Inter may, under general regulations to be issued by him, grant preliminary permi authorizing the occupation of lands valuable for waterpower development for period not exceeding one year in any case, which time may, however, upon a plication, be extended by the Secretary of the Interior if the completion o the application for lease has been prevented by unusual weather conditions o by some special or peculiar cause beyond the control of the permittee.

Now, Mr. Finney, I wanted to ask if that would not enable the Secretary to favor personal friends or political friends, and would it not be in his power to control that absolutely, no matter whether any person had applied before and complied with all the requirements made under the rules and regulations which he might issue? Is it not in the hands of the Secretary of the Interior to give that to whomever he pleases?

Mr. FINNEY. The purpose of the proviso, Senator Smoot, of course you can see. I do not think it has that effect. The purpose, of course, is to enable persons to get the data and to put them in position to decide whether or not they want to get a permanent lease or permit. Developers do not care to put their time and money into an enterprise until they make some preliminary investigation, and they do not want to make a preliminary investigation if there is a probability that that particular site will be given to somebody else. The purpose was to give a brief preliminary period in which a would-be developer can get up data and look into the proposition to see if he wishes to make an application.

Senator SMOOT. I know what your general idea is, and perhaps it was the idea of the framers of the bill; but is it not a fact that under the wording of the bill the Secretary of the Interior will have absolute power to control the natural resources of the United States and transfer rights for the creation of water power anywhere in the United States to whomever he may please?

Mr. FINNEY. I do not understand that can be done under the regulations proposed in this proviso. The proviso anticipates the making of general regulations. Those general regulations, when issued, can be taken advantage of by anyone who is qualified.

Senator SMOOT. It goes further than that. It says here that the Secretary may, under general regulations to be issued by him, do certain things. It does not say he shall at all. It is left entirely with

the Secretary of the Interior as to whether, after complying with the regulations, the permit shall be given to the party; and I do not see why, if anybody becomes interested in a water power and he has complied with all of the regulations that have been made by the department under the law, any person should have a right to say that notwithstanding that you have complied with all rules and regulations and the law, you have not the right now to go on with the development of the enterprise."

Mr. FINNEY. I do not think that that was the purpose of the bill, to discriminate, or to permit anyone to discriminate.

Senator WORKS. But it does.

Senator SMOOT. But it does, does it not?

Senator WORKS. It does leave it to his discretion, does it not?

Mr. FINNEY. It does leave it to his discretion, with the further qualification that this is all under general regulations, and anyone who is qualified can take advantage of it.

Senator CLARK. With regard to my notion in regard to the matter to which I called your attention, I want to be perfectly clear and plain. Many of us have complained—perhaps justly and perhaps unjustly—that systematically, for the past 8 or 10 years, the laws of Congress have been hindered and impeded in their operation by the administrative officers of the Interior Department. Now, that is asserted by some and is denied by many others. But the fact remains as a absolute fact that we have upon the statute books now laws in substance as this, leaving everything to the discretion of the Secretary of the Interior. Now, it is unfortunate that some of us have come to believe that where that discretion is lodged with the Secretary there has been a disposition not to administer those laws in a way of putting the laws into active operation, but not to administer them. For instance, you take the rights of way across the public lands for water-power development, the old act providing for rights of way. It is absolutely impossible, under the regulations of the Interior Department now, for that law to operate. You can not go into my State, as I understand it, or you could not a year ago or a year and a half ago, and take out the waters, which are under the control of the State, under the old law, freely and honestly.

Senator ROBINSON. I think you have not grasped the idea that I think is involved in Senator Clark's question. His suggestion is an inquiry as to whether or not, when the applicant is qualified and has complied with the regulations prescribed by the Secretary or by the law, it should be mandatory upon the Secretary to grant a permit, or whether he should still have discretion to refuse to do so, notwithstanding the applicant may be qualified and may have complied with every rule and law of the department necessary to secure a permit.

Mr. FINNEY. I think the applicant should be qualified to carry forward the development which he propses to make, and to complete the development of a given site, and if he is so qualified, there would be no discrimination.

Senator ROBINSON. His question does not address itself to discrimination at all. You have not got it yet. His question is whether, the applicant being qualified and having complied with all the rules and regulations prescribed by law and by the depart-

ment, the Secretary of the Interior should still be authorized t exercise discretion as to whether he would issue the permit.

Mr. FINNEY. He thought that the law should be mandatory, tha the executive officers should simply carry out the law and have n discretion.

Senator Robinson. In other words, the law and regulations of th department, fixed under the law and by authority of the law, should prescribe the qualifications of the applicant and the conditions tha he should comply with before he should be entitled to a permit o a lease, and that when he did possess those qualifications and did comply with those regulations then he should be entitled, as a matter of law, to his permit of his lease, without regard to the discretion of the Secretary. That is the idea involved in his question.

Here is the proposition in a nutshell, as suggested by Senator Clark: If the Secretary of the Interior should be antagonistic to the development of future water-power interests, could he, under this bill, refuse to grant leases or make leases, notwithstanding every condition of law and regulation of the department might have been complied with? That is the inquiry Senator Clark makes.

Senator CLARK. In other words, to follow that up a little further, whether or not his particular ideas as to the best way to develop water power is to govern or whether the law and regulations of the Interior Department should govern.

Mr. FINNEY. It all gets down to the question of construing the language of the act whether "authorized and empowered" means directed or whether it simply leaves it to his discretion.

Senator SMOOT. I understood you, Mr. Finney, in answering the question as I propounded it, to say that in your opinion the word "may" did leave that discretion in his hands absolutely, and I agree with you in that opinion. I do not think there is any question as to that point.

Mr. FINNEY. I have heard of the word "may" being construed the same as "shall."

Senator CLARK. In you view, Mr. Finney, ought "may" in this bill be "shall," or, in other words, ought it to be mandatory?

Mr. FINNEY. From a departmental standpoint, I think there should be a certain amount of discretion vested in the executive officer. I have looked into the laws of a number of foreign countries and I have looked into the laws of the various States, and I find that there is very much discretion left in those officers by the law.

Senator SMOOT. But that only applies to the transfer of the land itself, does it not—that is, the title—from the Government to the individual entryman, where there certainly has got to be a discretion on the part of the department as to whether the rules and regulations and the law itself have been complied with or not, but that does not apply, does it, to the transfer of a right or a lease of a water power?

Mr. FINNEY. Yes, Senator; in some countries—like Canada, and France, and so forth—the word "may" is used in their statutes; that certain executive officers may grant certain rights.

Senator CLARK. Let me ask you one question about the departmental idea about discretion.

Suppose the Congress of the United States should pass a clear, definite law, embodying all the rules and regulations under which a

could secure the privileges supposed to be granted under this ... the Congress itself making the regulations instead of the Secretary, would you think in that case that the Secretary ought to be allowed to exercise discretion to depart from those rules and regulations?

Mr. FINNEY. If you pass that sort of law he would have no discretion, and it would be his duty simply to carry out that law.

Senator CLARK. Yes; simply to carry out that law. Now, suppose the Congress should pass a law providing that the Secretary make certain rules and regulations and upon the compliance with those rules and regulations he might grant the permit. Now, suppose you, as an individual, for instance, desirous of developing one of these water powers, complied absolutely with the law as passed by Congress and with all the regulations that had been theretofore made by the Secretary of the Interior in connection with that particular thing, do you think that the Secretary of the Interior, after you have made your application, should seek to exercise discretion as to whether he should grant it or not?

Mr. FINNEY. No; I do not.

Senator CLARK. Then what would be the harm from a departmental point of view, of inserting that in here as a right which a man has?

Mr. FINNEY. Well, if proper safeguards can be thrown around the matter, I see no objection to it.

Senator CLARK. Could not the Secretary do that in his rules and regulations in connection with it?

Mr. FINNEY. If given the authority to make rules and regulations; yes.

Senator STERLING. The right should be given to the first qualified applicant.

Mr. FINNEY. Well, I do not know as to that. I simply think that the right should exist in the bill somewhere that a man who complies with the law and all the rules and regulations should be entitled to a permit.

Senator STERLING. That is, the first qualified applicant who complies with all the rules and regulations and the law should be entitled to the permit?

Senator ROBINSON. The proviso referred to by Senator Smoot, in my judgment, is not open to the criticisms implied in the question by Senator Clark. To my mind, it is necessary to invest in the Secretary some discretion as to granting the preliminary permits, unless we do provide by law, as suggested by Senator Sterling, that the first qualified applicant should be entitled, or that qualified applicants should be entitled in order of their filing or the presentation of their applications. Unless that provision is incorporated in the act it is necessary to vest some discretion in the Secretary, because applications might be made one after another asking for a preliminary permit, and if it was mandatory upon the Secretary to grant them, it would be impossible to ever secure development. So I object to that particular proviso unless you materially modify the language of the section, we would have to give the Secretary discretion.

Senator SMOOT. I am perfectly aware of the fact that if the word "may" is changed to "shall" there should be some wording in the bill guarding the rights not only of the Government but of the applicant as well.

Senator NORRIS. Why is it necessary that any permit should be given for the purpose of enabling applicants to obtain this data? Would it not be practicable for several persons to be obtaining the same data at the same time under the same power proposition? Is it necessary that a man should have an exclusive permit in order to gather this data?

Mr. FINNEY. I am told that the investigation of possibilities on these sites involves surveys and various investigations, and the question of raising money and making other arrangements which are quite expensive, and they would not be justified in going to that monetary expense, wasting their time, etc., investigating a property thoroughly with a view to developing it unless they have some assurance that at the end of the time, if they found it all right they would get the permit.

Senator NORRIS. Under this proviso, as I read it, the Secretary would give a permit for a year, and I would have the exclusive right during that year to investigate the feasibility of that proposition. Why could not several persons be making the investigation at the same time? Why is it necessary for me to have an exclusive right to gather this data, that has nothing to do with the financial part of it? I am simply asking for information. I do not know, and I only want to know, why it is necessary to give an exclusive right. It seems to me that would enable people who wanted to retard the development of any proposition to have one man after another get a year's time, in order to hold the work up and keep other people out.

Mr. FINNEY. Why, it is not necessarily given for a year, but for a certain period not exceeding one year, and it is exclusive so far as it goes.

Senator NORRIS. I do not see why it should be.

Mr. FINNEY. That is on the same theory that a man boring for oil has a limited time to develop the possibilities of the oil land, to find out whether he would want a permit, and he would not want to go ahead and make the preliminary investigation unless he was assured that he could get the permit if he wanted it.

Senator NORRIS. Would it be necessary to make a survey to see about the dams?

Mr. FINNEY. The flow of the stream, and investigating the possibility of dams, survey out the pressure pipe lines, etc. I am not an engineer, and can not give you complete information on that subject.

Senator NORRIS. But I imagine that several people could be making the investigation at the same time.

Mr. FINNEY. That is true, but it is doubtful whether they would want to go to the expense unless they had some assurance that if they desired it they could get a permit.

Senator WORKS. I want to ask about another phase of this matter. Have you considered to what extent these power sites might be used jointly for the development of power and for the storage and distribution of water for irrigation purposes?

Mr. FINNEY. The matter has been given some consideration. This bill does not deal with the irrigation feature at all.

Senator WORKS. That is just the trouble with the bill, I think, one of its troubles.

Mr. FINNEY. The value of a water site depends, you know, upon a continuous flow of water; there must be a flow the year around.

Senator WORKS. I suppose a grant that might be made under this bill would be exclusive of the right of individuals to use that site for other purposes, would it not?

Senator ROBINSON. Certainly; that would be necessary.

Mr. FINNEY. So far as the site is concerned.

Senator WORKS. Out in California the use of these sites might be much more important for irrigation purposes than for the development of power. We do not want these power companies, so numerously and ably represented here, to take up all these sites for power purposes and leave us without opportunity to supply water for irrigation purposes.

Mr. FINNEY. Of course, in many instances, Senator Works, they would be able to pick up the water lower down and use it for irrigation purposes.

Senator WORKS. I am talking now not about the water; I am talking about the site—the dam site and reservoir site that may be essential for the development of and storage of the water for irrigation purposes. If you grant these sites to power plants exclusively for the purpose of generating power, that, of course, prevents their use for irrigation purposes.

Mr. FINNEY. Your statement is an argument for vesting some discretion in the Secretary of the Interior.

Senator WORKS. I do not want to leave that important question to the discretion of any departmental officer. I think it is a matter that ought to be considered by this committee. It is a very serious question, and one that involves the rights of the Western States. Of course, it is not a matter of very much importance in the East, where water is not necessary for irrigation purposes, but it is important, and exceedingly important, to the Western States.

Mr. FINNEY. Of course, your Western States are interested in irrigation.

Senator WORKS. The trouble about this bill is that it comes directly in conflict with the rights of the States, although there is a clause in it to the effect that it shall not do so; but it does it, and I think that is one of the great questions involved in this inquiry.

Mr. FINNEY. In what particular, Senator?

Senator WORKS. In every particular. To us the storing of this water at these sites for irrigation purposes is a matter of great importance. If the Government can grant all of these sites for the purpose of developing power, that takes away from the States the right to develop the water and store it for purposes of irrigation, the right of regulating the rates, and various other things.

Mr. FINNEY. So far as these sites are concerned, this bill applies only to the public lands of the United States.

Senator WORKS. There is not any question about the legal right of the Government to deal with its own property, with certain limitations involved in the nature of its ownership, but I suppose

the Government does not desire to do anything that will prevent the use of the water for irrigation purposes in the West.

Mr. FINNEY. Certainly not. It is also desired to develop the power, because in many cases it is an adjunct to irrigation.

Senator WORKS. It is, in some instances, of course, an adjunct to irrigation, and that is a matter I expect to inquire about a little later on, and if your water-power bill dealt with both purposes it would be quite different, but you propose to make these grants for the exclusive purpose of generating power.

Mr. FINNEY. Some engineers could probably present that feature more clearly than I could, but I do not think a joint use is considered practicable.

Senator WORKS. You take the case of the city of Los Angeles. It expended $25,000,000 to develop a water system, and that system is expected to be used not only for the development of water power but embraces the use of the water for domestic and irrigation purposes as well. It is one system of reservoir sites and dams used jointly for both purposes. That you will find will occur in a great many instances in the West, I apprehend.

Mr. FINNEY. My point is that if you store and use water for irrigation during three months in the summer you can not have that same water the remaining nine months for generating power, because, as I understand it, the power people require a continuous flow of water during the entire year in order to generate electricity.

Senator WORKS. They may secure that continuous flow by the erection of dams for the storage of water for part of the year or for the whole year. Undoubtedly the water that is used for power purposes may be again used for irrigation?

Mr. FINNEY. Yes, sir.

Senator WORKS. But the trouble about it is that you propose to take away the site that will enable the irrigators to use this water for irrigation purposes, and use that site exclusively for the purpose of developing power, and it is taken away from the irrigators entirely. Why could not both of those be treated together? It might be a good idea to provide for the use of the water for both purposes.

Mr. FINNEY. I do not think it is practicable to use it for both purposes.

Senator WORKS. It is quite practicable, as I happen to know.

Mr. FINNEY. Possibly power may be generated in irrigation canals, for instance, during irrigation seasons.

Senator WORKS. There is no doubt about that. I wanted to know if there was any practical objection to that phase of it?

Mr. FINNEY. This section 1 also provides that these leases or permits—by the way, the term "lease" is used here. It is not really a lease in the true sense of the word, as I understand it; it is a mere permission to use for a definite period.

Senator SMOOT. It is virtually renting the ground, is it not?

Mr. FINNEY. That would be one definition—permitting the use for a definite period under stipulated conditions.

Senator CLARK. And for a price.

Mr. FINNEY. Later on there is a provision for charges.

Senator CLARK. If that does not make a lease or rental it comes pretty near it.

Senator SMITH. It becomes the same principle.

Mr. FINNEY. I see no difference in principle between the term used here, the proposition made here, and the existing law.

Senator CLARK. So far as I am concerned neither term is obnoxious to me, but it demonstrates to me that——

Mr. FINNEY (interposing). The existing law provides for a permit revocable by the Secretary of the Interior. Our permits, under that law, are, of course, issued for no definite term, as they are revocable by the Secretary; and in some instances charges are being collected.

Senator CLARK. Do you think it was contemplated at the time that legislation was passed that charges should be collected?

Mr. FINNEY. Well, the officers of the Agricultural and Interior Departments have decided that they had a right to collect charges.

Senator CLARK. Yes; they decided it; but do you think that was the intention of Congress?

Mr. FINNEY. I prefer not to express myself on that.

Senator SMOOT. One question there: Do you think that the courts will uphold the Government in charging a rental, say, of $10,000 a year for a piece of land that is not worth more than $100?

Mr. FINNEY. I can not admit your premise.

Senator SMOOT. Then, let me explain it. Supposing a water-power site is developed on private land, but in order that it shall be carried to where it shall be used it must cross a piece of Government land, amounting to 30 acres, worth $1.25 an acre, which would be $37.50 for the full value of the land, and it is impossible to develop the water power without that land. Now, the Government requires a lease, and they charge so much per horsepower, and the horsepower developed there named in the lease will bring to the Government, say, $10,000 a year when all the interest the Government has in it at all is the $37.50 for 30 acres of land. Do you think that the courts would uphold the charge for that lease of that land and the rental of it, as the case may be, of $10,000?

Mr. FINNEY. In the first place, Senator Smoot, I do not think $1.25 is the value of the land.

Senator SMOOT. You will admit this, that if it was not for the water-power site they would not even get the $1.25.

Mr. FINNEY. The $1.25 has probably grown up by reason of the fact that homesteaders are allowed to commute land at $1.25 an acre, causing that price to be fixed on the land.

Senator SMOOT. There is not a session of Congress but what has passed through this committee at least a dozen bills granting to the different States or cities certain lands at $1.25.

Mr. FINNEY. That is just a mere nominal consideration, Senator Smoot, and not an attempt to fix the value of the land, as I understand it. In the case of the water-power site, in the first place, the land is located in canyons where the land is almost valueless for agriculture, and has very little value for grazing. It is not a question of disposing of the land at its value, but of leasing it at its value for a water-power site. The value of it is what that party would be willing to pay for it if it were in private ownership.

Senator SMOOT. This case I am speaking of is the case of a right of way over about 30 acres of land.

Mr. FINNEY. That is only a fraction of the plan that you have stated. You should take the whole plan. In California, Senator Works's State, the Great Western Co., I understand, bought a lot of land for reservoir and other adjuncts of their power plant. What they paid for it, I do not know, but they valued it at over $26,000,000. That is the value of that site to that company as a power reservoir plant.

Senator SMOOT. But the case that I cited I can tell you exists to-day, where there are power plants built upon land owned by the power company, and simply because of the fact that they have got to cross public land the department claimed that they have a right to assess them upon their horsepower development for the reason that it crosses over the 30 acres of public land. That is the reason that I asked the question, because I know a case of that kind now existing.

Mr. FINNEY. That may be, Senator Smoot. There is another feature, though, in connection with this charge, while I am on this: The purpose of the charge is not to really obtain the revenue. That is not the primary purpose. The purpose of the charge is to have a regulative measure. The authorities believe that the charge tends to regulate the power company. The Bureau of Corporations, I think, made some investigations on that subject, and they found that a reasonable charge is in the interest of the consumer, and does not add to his burden, but, on the contrary, operates to reduce his burden. I will show you how that might work out. When you give a man a tract of land for a power site, that does not operate to make him lower his rates to the public. On the other hand, if you lease a power site on condition that he pay a certain charge on a sliding scale, as his price to the consumer runs up and down, there is some inducement then to induce him to lower his charge to the consumer. Furthermore, these sites do represent a resource. Whether you agree with that or not, the people of the country, many of them, believe that there should be some value received from these resources, and this bill provides for that sort of a charge, first to pay the expenses of administration, and then the balance to go into the reclamation fund. There is a further development of the western resources. And then after it is returned from that fund the bill provides that half of the proceeds shall go to the State where these power development projects are located.

Senator CLARK. I just want to ask this one question on the question of price that has been opened up by Senator Smoot: Do you think the Government of the United States, which is interested in the development of these Western States, ought to tax that development for a right of way over this land more than the courts would allow for the right of way to an individual owning those lands under condemnation proceedings? In other words, ought the Government to put itself in the position of exacting all the traffic will bear?

Mr. FINNEY. No; and I do not think the bill proposes that, Senator.

Senator ROBINSON. Where is the provision in this bill relating to rights of way for power purposes over Government land?

Senator CLARK. When we speak of rights of way you understand we mean places to set anything that is used in connection with the power plant, buildings, or anything of that sort.

Senator ROBINSON. I understand that.

Senator WORKS. Mr. Finney, you make no claim that the Government has any control over the water that has been transferred to anybody, do you?

Mr. FINNEY. Not only that——

Senator WORKS. I say you make no claim of that kind, do you?

Mr. FINNEY. There is a provision in the bill here that says it shall not interfere with the rights of the State to control the water.

Senator WORKS. Would these power sites be worth anything if a man had no right to the water, or would they be more valuable than the land?

Mr. FINNEY. It would be of no value, practically.

Senator WORKS. Then, practically, the Government is charging for the use of the water, is it not?

Mr. FINNEY. They are charging for the use of Government land which is so situated that the power is susceptible of being developed in that area.

Senator CLARK. Why not use that same plan in the construction of a railroad across the Government land? For instance, here is a railway going into a pass, and the only place that it can go through is that pass: now, why not apply this same principle to the passage of that railroad over the Government land that you apply to the passing of this water over the Government land? The railroad is a private corporation, the same as these water-power corporations may be, or the stock may be owned by a single individual, the same as these water-power corporations may be. In principle, what is the difference between the two? Now, what would you do if the Government owned a pass through a mountainous tract which was the only way in which a railroad could get through to accommodate a great body of the people? You would not think of imposing anything of this sort for a right of way across the Government land in a case of that kind, would you?

Mr. FINNEY. Of course I know what the previous policy has been with respect to railroads. The policy has been to give them the land.

Senator CLARK. I am not speaking about any grant of land, Mr. Finney, and we might as well be square about this thing.

Mr. FINNEY. You are speaking of rights of way?

Senator CLARK. I am speaking of rights of way, and we know that the proceedings to secure a railroad right of way are very simple. Now, the land in those canyons is absolutely worthless for agricultural purposes or anything else; it is only good for one purpose, and that is to hold up a railroad that goes through there; and the land in one of these power sites is absolutely worthless except for one purpose, to wit, to be used in connection with the development of water power from water which belongs to a State. Now, why should there be this distinction?

Mr. FINNEY. Because you are dealing with an entirely different proposition. We are dealing now with the development of private corporations for private gain. It is true they are serving the public, but they are private corporations for private gain.

Senator ROBINSON. The Government can regulate the railroads, and they fix now the charges to be made by the railroads for transportation of both freight and passengers under constitutional limitations.

Senator CLARK. So they can in this case.

Mr. FINNEY. I say the purpose of this bill is not primarily as a revenue measure.

Senator NORRIS. Is not the reason the Government can regulate it the very fact that it has this hold-up proposition, as it has been called?

Senator WORKS. What do you call it?

Senator NORRIS. Well, it could be used for that; there is no doubt about that. But is not that the reason the Government can regulate it? If you give that away there is no power to regulate it.

Senator CLARK. I do not think that some of us who do not agree with the details of this bill would object to the Government regulation of rates for the interstate distribution of electrical energy. But where everything should be under the control of the State and its utilities commission this bill allows the Government to step in and burden it.

Senator NORRIS. My understanding is that it is claimed that because the Government happens to own this strip through this canyon, which you say is useless for any other purpose, they use the power there to control that corporation, because they do have that leverage there, and it happens to own that canyon, that is necessary in the development in this particular proposition, and that that is the only reason—I perhaps ought not to put it that way—but that is the main reason why the Government makes the charge; that is, exercises its control over it because it owns it, to regulate the price to the consumer.

Senator CLARK. Why should the Government regulate the price to the consumer in a State where every step of the operation of the company and of the site is confined within the State?

Senator NORRIS. It might not in that case.

Senator CLARK. That is what I am trying to get at.

Mr. FINNEY. There are a great many reasons that might be mentioned. The moment this power company gets title to this land they put that right in as a basis for the rates that they charge the public, and value it at so much.

Senator CLARK. I am not speaking of a fee title at all.

Mr. FINNEY. If the General Government retains title to the land and gives them permission to use it, they can not then use the value of that land as a basis to increase the rates.

Senator CLARK. You are laboring under a misapprehension.

Mr. FINNEY. No; I am not. Perhaps I am a little beside the issue. I do think the Government is properly justified in holding up a tract of land under a bill of this kind in order that it may control or have the States control the development of these resources, the main object being to get the power at the lowest possible rate to the consumer consistent with fair income.

Senator CLARK. Is there not some way in which that can be done without imposing a cash burden upon the power company or upon users of the power? Now, we are all familiar with this fact - -

Mr. FINNEY (interposing). If you give them free vent you lose the regulating benefit of a sliding charge.

Senator CLARK. Why should there be a sliding charge?

Mr. FINNEY. I am not an expert on that subject, but there are others here who are, and they say it has a value to be used in regulation.

Senator SMOOT. Right in connection with that I was going to ask you when you made the statement before that the sliding charge would be an inducement for the man who develops the power to reduce his rate, how you make that out.

Mr. FINNEY. Yes, sir.

Senator SMOOT. I can not, for the life of me, see why a man would reduce his rates 10 cents to get 1 cent. The statement does not appeal to me that such a thing is possible, that a man who has a desire to get all out of the power he can possibly get, because he has a sliding scale will reduce his price 10 cents in order that he may get 1 cent from the Government.

Mr. FINNEY. Of course you think the inducement would not be great enough?

Senator SMOOT. Certainly it would not, Mr. Finney. Anybody would know that it would not. Nobody is going to give up 10 cents to get 1 cent if his idea is to get all he can out of the property.

Mr. FINNEY. Well, the object, I presume, is to have a minimum and maximum far enough apart so that he can run it up and down.

Senator SMOOT. You know that the minimum and maximum are not far enough apart to absorb all the charge that may be made for the power.

Senator NORRIS. Let me suggest, Senator Smoot, in connection with that, do you take into consideration the fact that when they reduce the rate they will increase the consumption of what they have to sell—their electric energy?

Senator SMOOT. Then they will lose that much more.

Senator NORRIS. You could fix a price so high on your electrical energy that nobody would buy it; you could make it prohibitive by price. If you reduce it so as to place it somewhere between the extreme low and the extreme high, that will bring in the largest amount of revenue, so that you should consider that in connection with the sliding scale, it seems to me.

Mr. FINNEY. There is another thought, too, that was brought up in the House hearings, and that is that the generating locality and the using locality are often widely separated; the generation may be up in the Sierras, and the use may be clear down in San Francisco—an entirely different part of the State.

Senator SMOOT. I do not see that that affects the principle at all.

Mr. FINNEY. The rental price there does not fall on the consumer at all.

Senator CLARK. Suppose the rental price were $10 per horsepower per annum, do you not think that that would add a little more, and that the company would be justified in charging more to the consumers than if it did not have to pay that?

Mr. FINNEY. Yes; probably that is true.

Senator WORKS. That would be a part of the operating expenses, of course.

Senator SMOOT. It would not make any difference where it was generated, or where it was distributed, the same would apply.

Senator NORRIS. Would there not be an inducement in that very case to put in the lease a provision that instead o fcharging $10 per horsepower the Government would charge 10 cents per horsepower providing the company did not charge above a certain price to the consumer for the energy which he sold?

Senator SMOOT. No contract like that ever existed.

Senator NORRIS. Why is not that part of your sliding scale? I take the very proposition you cited. I took your own illustration. I do not know whether it ever existed or not, but you gave that as an illustration.

Mr. FINNEY. The bill also provides that these permits shall not be revocable except for breach of the conditions, and forfeiture for that breach is required to be by proceedings in court.

The object of that particular part of the bill is to give a definite and fixed tenure to the term of the permit.

Senator SMOOT. Why would it not be better to make it a straight 50-year lease rather than have it as it is here, "not more than 50 years"?

Mr. FINNEY. That question was discussed in the House hearings, and it was suggested there that there might be small developments desired for temporary uses that would not be used or desired for that length of time.

Senator CLARK. Mr. Finney, right in that connection, and I am asking for information, is it not possible for the Department of the Interior to terminate this lease at any time it pleases after three years?

Mr. FINNEY. No, sir.

Senator CLARK. Is it not possible, under the terms of this lease, for the Government to step in and purchase the improvements and everything of that sort and oust the party having the lease?

Mr. FINNEY. No, sir; not at the end of 3 years, and not until the expiration of 50 years.

Senator NORRIS. That brings up a point which I would like to have you explain. That is, I would like to have you explain the language in the bill. I agree with you that that is the construction that ought to be placed on it, yet it seems to me that the language is very cumbersome. It reads as follows:

SEC. 5. That upon not less than three years' notice, which may be issued at any time after three years immediately prior to the expiration of any lease under this act, the United States shall have the right to take over the properties.

And so forth.

Senator ROBINSON. That is as clear as daylight.

Senator NORRIS. Is it?

Senator ROBINSON. Yes. That simply fixes the time within which the Government must serve the notice.

Senator NORRIS. It is evidently not as clear as daylight; Senator Clark does not understand it.

Senator CLARK. No; I just ask for an explanation. I think Senator Robinson is right about that, however.

Mr. FINNEY. You see, three years before the expiration of the 50 years, or, in other words, after 47 years, notice shall be given.

Senator ROBINSON. If the Government proposes to take over the property at the end of the lease which has already been granted, it must give the operator three years' notice. That is in the interest of the operators.

Senator WORKS. Do you know to what extent irrigation is being carried on and water developed by the use of electric power in the West?

Mr. FINNEY. I have seen a great many pumping projects out there where water is pumped from river beds or wells by electrical energy, and I think it is going to be much more widely used in the future than it has been in the past.

Senator WORKS. I presume you are familiar with the law in California governing the use of water, and that it gives a perpetual right and it is not limited to 50 years or any other number of years. What are you going to do with all those rights in California, for instance, for use of the water that has been supplied and power that will be developed under a law of this kind?

Mr. FINNEY. I suppose you are contemplating that the plant is going to be annihilated?

Senator WORKS. You have provided here that the Government may take over the property and operate it?

Mr. FINNEY. Of course one of the features of this legislation is that at the end of 50 years conditions may have changed. It may be found, at the end of that time, that it is desirable to take over and operate the plant. So far as there are public utility districts, the districts or towns under the California law may take over an electric plant and operate it. The law passed by the last session of the legislature authorizes the formation of districts which go out beyond the town where the plant is large enough to serve several towns. That district may build or take over one of the plants, and thereafter operate it for the benefit of the entire district.

Senator WORKS. That does not alter the question of the rights of the individual user of water to the perpetual use of it.

Mr. FINNEY. When one of these districts takes over an existing plant they undertake to fulfill the existing contracts.

Senator WORKS. We can not speculate upon what may be done; the question is what is authorized by this statute, if it shall become a statute?

Mr. FINNEY. This contemplates that if it is taken over some one will continue to operate it. It provides three contingencies, (1) the releasing to the original lessee, (2) the leasing to some one else on condition that he carry out the contracts of the original lessee, (3) the taking over of these plants by the Federal Government and operating them, or turning them over to the State for its development.

Senator WALSH. The question propounded by Senator Works brings up a very interesting question. Of course, every man who gets a water right wants a perpetual water right, so if he sells the land the sale carries with it the water right, even though the term expires. On the other hand, if you give an operating company the power to make contracts indefinitely, as the contract or lease is expiring, if they do not want to take a renewal themselves, they will be very apt to make improvident contracts for the supply of water, which will tie up the project for all future time.

Senator WORKS. In California they could not limit the use of water by the individual irrigator in any such way as that.

Senator WALSH. It is not a matter of limiting such use. We have a pumping project in Empire Valley. That company enters into contracts, and it may contract indefinitely for the future, and it does contract to pump during the life of the corporation. The land-

owner simply has a contract by which the company agrees to pump water for him and put it an the land. The landowner has no water right at all. The right is in the operating company to take that water out of the river. The landowner wants a perpetual right, but he can not, under any circumstances, get a right that would extend beyond the life of a corporation operating. There are two considerations: One is to give the landowner as near a perpetual use of the water as you can do it, and, on the other hand, to see that as this company's contract is expiring the corporation does not bind up the future operators by contracts that may be improvident.

Senator WORKS. You do not mean to say, Senator, that the individual gets no right to the use of the water—perpetual use—do you, by what you said?

Senator WALSH. Yes; I say that.

Senator WORKS. Then your law is quite different from ours.

Senator WALSH. It is not a matter of use at all. Here is a farmer down in the valley. The operating company pumps water out of the river, and then pumps it up into his ditch. Now, if that operating company dies, for any reason, he has not any water—he can not get any water. As soon as the pumps stop he has no water right at all; he has no means of getting his water.

Senator WORKS. He has the right to the water, but he may not have the means of getting it.

Senator WALSH. He does not make any appropriation of the water at all; the operating company appropriates the water and supplies it to these consumers.

Senator WORKS. Your law is different from ours.

Senator ROBINSON. Under this provision, what is there, if the company receives notice from the Government that the Government is going to take over the property at the end of the term, to prohibit the company from accepting bonuses in large sums and making contracts to furnish power for a period beyond its lease, thus fixing or attempting to fix a charge for the water itself, and binding the Government or its assigns to furnish water power at less than would be remunerative?

Mr. FINNEY. That is attempted to be provided against, Senator, in section 7.

Senator ROBINSON. I have not read that section yet.

Senator WORKS. You must bear in mind, Senator, that the rates to be charged are fixed by the States or municipal authorities.

Senator ROBINSON. Not always.

Senator WORKS. Not only for the protection of the consumer but for the protection of the corporation that supplies the water.

Senator ROBINSON. They are not always, are they?

Senator WORKS. I think so; yes.

Mr. FINNEY. Senator Works lives in a State where they do more or less irrigation from wells. A man there would have his water right on his own land.

Senator WORKS. Yes, sir; that would be quite different.

(Whereupon at 12 o'clock noon the committee took a recess to 10.30 a. m. to-morrow.)

THURSDAY, DECEMBER 10, 1914.

COMMITTEE ON PUBLIC LANDS,
UNITED STATES SENATE,
Washington, D. C.

The committee met at 10.30 o'clock a. m.

Present: Senators Myers (chairman), Thomas, Robinson, Thompson, Hughes, Chamberlain, Smoot, Clark, Works, Norris, and Sterling.

Present, also, Senator Shafroth.

The CHAIRMAN. Mr. Finney said to me yesterday afternoon that if it suited the members of the committee just as well he would really rather be permitted to make, for a very few minutes, just a short connected statement of his views, and then to submit to any examination by members of the committee. He suggested that he thought he would get his views in the record in better shape in that way, and then he could answer any questions just as well afterwards, if it suits the members of the committee.

Senator SMOOT. Of course, but there may be some things that can be cleared up by a short statement while he is making a statement on a particular point, and it might be much better to ask the question right then.

The CHAIRMAN. Certainly; I do not care to make any hard and fast rule about it, but so far as possible, I think perhaps it would be well to follow that course.

Mr. FINNEY. I will only take four or five minutes for the little statement I desire to make.

Mr. SMOOT. I do not want Mr. Finney to think that the committee wants him to be cut short on any statement he wants to make on the bill. I think that Mr. Finney ought to make a clear statement as to what he thinks are the essential features of the bill, and what he understands its object to be, whether it takes five minutes or five hours.

Senator CLARK. My interruptions yesterday were on the assumption that Mr. Finney was beginning a discussion of the bill in detail.

Mr. FINNEY. No; I was just stating my general ideas.

The CHAIRMAN. Go ahead, Mr. Finney, and resume your statement.

STATEMENT OF MR. EDWARD C. FINNEY—Continued.

Mr. FINNEY. If the committee please, I would just like to state briefly the principle features of the bill and why the department believes it should be passed, and then take it up section by section if the committee wishes.

We believe that bill 16673 will secure the development of the water-power resources on the public lands, because it gives a certain fixed tenure for a definite period upon conditions that will be known in advance in each case to the corporation or individual who undertakes the development; and it is the thought of the department that whatever charges may be imposed, if charges be imposed, will be so small or so reasonable that they will not be a burden upon the consumer. We think it will protect the interests of the general public by providing for regulation of service and of rates and stock and bond issues and other matters which would affect ultimately the charges

to the public, either by State control, or, where there is no State control or where it involves an interstate matter, by Federal control.

Then we think also it will contribute to the public interest by contributing to the development of other resources any receipts that may be derived from the development of these resources; also by the use of electric energy involved in this proposed law, in the development of irrigation and for other uses. Then, furthermore, if there be no surplus revenue, after it has been returned to the Treasury, that the State shall secure 50 per cent of it in cash. That is along the general line of what is now authorized by Congress with respect to returns from national forests.

One of the other important things about the bill is that it looks to the future in that it does not pass out the fee simple title from the United States, but keeps these resources in such shape that at the end of this 50-year period Congress will be enabled to take such steps with respect thereto as it may deem best for the future, and will be free-handed to continue to permit their use by private individuals or corporations, or to grant them to States or municipalities, or have them developed under some sort of Federal control, or whatever it deems best at that time in view of conditions which then exist; and I do not think any of us will undertake to predict what the situation will be 50 years from to-day, as it is a well-known fact that electrical development and electrical use is growing and widening now, and new uses are being found all the time.

That last feature involves not only the fee simple title to these lands in the Federal Government, but it involves the leasing and granting of permits at the present time under such conditions as will not preclude their recovery. If we grant them to such corporations to-day under such conditions that it will be financially or physically impossible to take them over at the end of 50 years we are virtually granting a permanent tenancy.

I take it that there will be no disagreement with the statement that there are certain things safeguarded in this bill which it is desired to guard against. One is monopoly; another is high rates to consumers; and the third I have already mentioned, namely, the inability to secure restoration of these sites at the end of a fixed period.

The monopoly is attempted to be guarded against by specific provisions in the forest bill, and also it is guarded against in part by the existing provisions of the Sherman law.

The question of the higher rates to the consumer will be guarded against by State and Federal regulation; also by provisions in this bill which, as I have already stated, seek to prevent overcapitalization and various other features which might enhance the prices which consumers would have to pay. And then as to the taking over, there is a specific provision made in the Ferris bill on that point.

Now, as to the past policy of Congress, from the very beginning Congress has only allowed these sites to be developed under conditions either revocable or limited in tenure. The first act that I know of is the act of May 14, 1896 (29 Stat., 120). That authorizes the Secretary of the Interior in the following language:

> The Secretary of the Interior be, and hereby is, authorized and empowered under general regulations to be fixed by him, to permit the use of a right of way to the extent of 25 feet, together with the use of the necessary ground, not exceeding 40 acres upon public lands and forest reservations * * * for the purpose of generating, manufacturing, or distributing electric power.

The next act was the general act of February 15, 1901, being 31 Statutes, 790, which, in part, reads:

That the Secretary of the Interior be, and is hereby, authorized and empowered, under general regulations to be fixed by him, to permit the use of rights of way through the public lands, forest, and other reservations * * * for electrical plants. * * * *And provided further*, That any permission given by the Secretary of the Interior under the provisions of this act may be revoked by him or his successor, in his discretion, and shall not be held to confer any right or easement or interest in, to, or over any public lands, reservation, or park.

Senator NORRIS. That is the act of 1901?

Mr. FINNEY. Yes, sir; that is the act of 1901, and is the general law now in force on the statute books.

Senator SMOOT. Providing it repeals the act of 1866?

Mr. FINNEY. Yes, sir.

Senator NORRIS. You assume that it does repeal the act of 1866?

Mr. FINNEY. The Circuit Court of the United States, I believe, has decided that the act of 1866 has been repealed by that act. I understand an appeal is to be taken in that case to the Supreme Court of the United States.

Senator NORRIS. Is that not broader than the other act?

Mr. FINNEY. The act of 1866 is the one that recognizes the right of possession, Senator, passed in the early mining days, and provided that anyone who had built ditches for mining and various other purposes upon the public domain should be protected in that occupation and use to the extent of the ground so beneficially used.

Senator NORRIS. It was not revocable?

Mr. FINNEY. It was not revocable. The right was based on possession, and the protection continues so long as the use continues.

Senator NORRIS. Since the act of 1901 has been passed there have been no rights acquired under the prior act, have there?

Mr. FINNEY. That is a disputed question. The department takes the view that these later acts repeal the act of 1866.

Senator NORRIS. Has anybody attempted to get it?

Mr. FINNEY. Yes, sir. This case I spoke of was one where a power company went into a national forest and attempted to acquire a right by constructing a power canal and plant, claiming that the act of 1866 gives them a right to do so.

Senator SMOOT. The case will be taken to the Supreme Court in a very little while?

Mr. FINNEY. Yes, sir. I think the Agricultural Department instituted an action against the interests, and the decision of the lower court was, I believe, that the act of 1866 has been repealed.

Senator SMOOT. It was not as broad as that; it was in rather a modified form, I think.

Mr. FINNEY. I am not undertaking to state the full purport of the decision, Senator Smoot.

Senator CLARK. I think another question also entered into that case, namely, the question of the forest reserve, as distinguished from other lands.

Mr. FINNEY. There possibly might be a distinction on that ground.

Senator CLARK. I think that question enters into the case.

Mr. FINNEY. There have been one or two other acts passed, a special act granting to the Edison Electric Co. a permission to

develop in a certain forest reserve, the act of May 1, 1906 (34 Stat. 163).

That provided that the duration of the permit should be fixed by the Secretary of the Interior immediately after the passage of the act. And then there was a provision made that the company should pay annually to the Forest Service such compensation as might be fixed by the Secretary of Agriculture. I think that term was fixed at either forty or fifty years.

Then the last act relating to power transmission was an act of March 4, 1911 (36 Stat., 1253). That related, as I say, only to the transmission lines. That says:

> That the Secretary of the Interior be, and he hereby is, authorized and empowered, under general regulations to be fixed by him, to grant an easement for rights of way for a period not exceeding 50 years * * * over public lands, forests, and reservations for electrical poles and lines.

Senator CLARK. Have any operations taken place under that act?

Mr. FINNEY. Yes, sir; we have granted quite a number of leases.

I mentioned these acts of Congress, Mr. Chairman, to show what policy has been followed in the past, and also to bring out the fact that the discretion, if I may call it that, vested in the Secretary of the Interior was somewhat similar to that proposed by the bill under consideration.

Senator SMOOT. Mr. Finney, right there, is it not true that the California act and the right of way act that you have referred to, and others, were desired because of the fact that companies could not do anything whatever under those acts of Congress because of the position that has been taken by the department as to revocable permits?

Mr. FINNEY. I think the purpose of the California company, Senator—and there was one other special act—in getting legislation was to secure a definite tenure, probably.

Senator SMOOT. I remember the California people being here at the time and appealing to me for assistance in passing the act, and they gave as a reason for it that they had so much money already invested there, and that they could not get any further money on account of the unsettled conditions of affairs, and they would very much prefer to take an act of Congress such as was passed than to lose all that they had put into the proposition.

Mr. FINNEY. Oh, of course that act did vest some general discretion. It did not vest the discretion as to whether they should have a grant or not, but it did vest discretion as to terms and conditions.

Senator NORRIS. Now, Mr. Finney, it might be just as appropriate here, since you are speaking of the discretion vested by this bill being similar to the act of 1901, to call your attention to the words in line 4 of page 1, as follows:

> Under general regulations to be fixed by him.

That is, the Secretary is authorized to grant these permits, but they must be under general regulations. That language is included in the act of 1901, and was, as I understand it, objected to by the department, and particularly, as I understand it, by former Secretary Fisher, who was Secretary of the Interior at that time, and he called attention, I think, in these hearings to the fact that that broad

language was objectionable for the reason that in a great many instances a regulation that would apply in one particular project would not have any application in another, and where the Secretary had to grant the permits under a regulation that was general and hence apply to all, it often occurred, on account of some peculiar condition of the locality, that he was really prohibited from granting permits in cases where it was conceded they ought to be granted.

Senator CLARK. Senator Norris, my impression is that Secretary Fisher was calling attention to the fact that the act of Congress entered too much into detail, and I think he stated in that hearing that the water-power representatives agreed with him in that, because of the fact that different projects, owing to their physical situation, required different terms.

Senator NORRIS. Yes; they required different regulations, but under the law he had to make regulations that were general; that applied to all of them, and could not grant the permit in any other way; and that objection strikes me as being very forcible, and I have considered about this language in here, why it would not be almost necessary in order to get a working law that there should be some place lodged somewhere to make exceptions to the general regulations when demanded, on account of some peculiar condition.

Mr. FINNEY. I think it is always true that any law or set of regulations which lays down arbitrary rules works a hardship in some instances. I do not know how it can be avoided unless you give the Secretary or some executive officer some discretion.

Senator NORRIS. That was his suggestion. He wanted the act, as I understood him, to give to the Secretary of the Interior a broader discretion than is included in the words, "Under general regulations."

Senator WORKS. That means practically unlimited discretion.

Mr. FINNEY. That would be objected to, I suppose, on the ground that discrimination might be practiced, and on the further ground that the general public and the investers would not know in any given case what they would have to do in order to secure the grant.

Senator NORRIS. Oh, yes; they would know. If there was a grant that had exceptional conditions he would make regulations applying to that grant, but the regulations would apply to all people who wanted to make application for the use of the power.

Mr. FINNEY. There would be a difference of opinion as to whether the proposition was exceptional or not.

Senator NORRIS. It is conceded, is it not, in water-power propositions that there are wide differences existing that require in one locality an entirely different regulation than would be required in another?

Mr. FINNEY. I think there must be some discretion given to an executive officer. I do not see how you can avoid it and have a workable law.

Senator NORRIS. It seems to me that Secretary Fisher's suggestion had merit in it and that it is deserving of consideration.

Mr. FINNEY. That only bears out the general proposition that some discretion should be vested in the Secretary. In some instances it does work hardship.

Senator NORRIS. It might prevent some very valuable water-power propositions from being developed.

Mr. FINNEY. I can conceive of a case where the Secretary might not be able to grant as liberal terms even as he desired.

We often hear about the liberality of Canada's land laws as compared with some of our own. I have looked up some of the laws of Ontario, and I find that they in their water-power acts give more discretion than we have given in ours.

Here is an act relating to the Province of Ontario——

Senator SMOOT (interposing). I hardly think that that would have any bearing on Congress. It is a different form of government

Mr. FINNEY. I was just citing it to show how the laws compared.

Senator NORRIS. It seems to me that it might become of value in this hearing.

Senator SMOOT. A law that would apply in Germany, for instance, might not apply to us, and what might apply in Canada might not apply to us.

Mr. FINNEY. It only shows what their lawmakers have done in the way of vesting discretion in the executive officers.

Senator NORRIS. It seems to me quite valuable.

Senator CLARK. Senator Norris, here would be one feature about it. Take the laws of Ontario. You may possibly compare the situation there with the situation in regard to our water powers in the Eastern States, or you might take their land laws and compare them with the land laws of the Eastern States.

Senator NORRIS. Here is the question involved, as I see it: The point that I asked Mr. Finney about is as to the amount of discretion that ought to be granted in our law to the Secretary of the Interior. I think that is a very important consideration, and I would like to have all the evidence I can get on both sides of it.

Senator CLARK. I would, too.

Senator NORRIS. And as to what Canada does in the way of granting discretion I think is valuable.

Senator CLARK. The only thing I call attention to is that this was not an act of Canada.

Senator NORRIS. Of course we know that this is an act of Congress; we are not Canadians.

Senator CLARK. I mean the act that he is going to cite is not an act of Canada and, of course, does not apply to the western part of the Dominion of Canada, where the water-power development now is, of course.

Mr. FINNEY. This particular one is the Province of Ontario, and I refer to section 8 of an act passed January 17, 1898:

> On compliance with the foregoing regulations and upon approval of the application by the minister in writing, he may order a lease of the water privileges to be issued to the plaintiff upon such terms and conditions, and at such rentals as may be fixed by the minister.

And then it goes on and limits the term to 20 years, with a privilege of renewal.

Senator CLARK. May I interrupt you there, Mr. Finney?

Mr. FINNEY. Yes, sir.

Senator CLARK. Mr. Finney, we have had a little experience with that same thing, and we have had experience where the Secretary of the Interior has insisted upon putting into a lease a waiver of all

right to appeal to the courts as to any matters connected with the case. Now, we do not want to put into this law, I apprehend, a discretion that would allow that.

Mr. FINNEY. No; and I do not think that is the desire of the present Secretary of the Interior, or the purpose of this bill.

Senator CLARK. I think the Secretary of the Interior afterwards gave up that form of lease. But many of those leases were granted in which the lessee absolutely agreed not to appeal to the courts for the protection of any right that he might have under the lease.

Senator NORRIS. Would that be worth anything, if he made such a stipulation? A man can not sign away his rights in that way.

Senator SMOOT. I hope that we pass a power bill that will have a better result than the act that you have referred to in Canada, for there has never been one single solitary water power developed under that act—not one. Now, I will ask you as an officer of the department to look that up, and if I am wrong in that statement I want to be corrected.

Mr. FINNEY. All right. I personally can not tell you whether that is correct or not.

Senator SMOOT. That is my information, that there has not been one power company developed under that act since its passage.

Senator NORRIS. I do not suppose they have so many water-power projects in Ontario as they do in our Western States.

Mr. FINNEY. I think you will find that the Canadian provisions or laws do vest a substantial discretion in their executive officers, and they permit these privileges to be granted for limited terms only.

Senator SMOOT. There is another difference too, as between Canada and the United States. The Canadian Government owns the water, and in the United States the State owns the water, and it is an entirely different proposition in the United States than in that nation.

Senator NORRIS. Yes, sir; but the particular case cited by Mr. Finney would be similar to one of our States. It is Ontario, it is not Canada.

Senator SMOOT. But Ontario does claim to own the water in Ontario.

Senator NORRIS. Yes.

Senator SMOOT. While the State owns the water in the State.

Senator NORRIS. Ontario is a State in Canada.

Mr. FINNEY. It does not seem to me that that is material, Senator. The United States owns the land; but it is not a question of the ownership; it is a question of the development of the power for the best use of all the people.

The CHAIRMAN. Mr. Finney was citing that Canadian law to show the discretion given to the executive officers.

Senator SMOOT. He is citing it also as a law that it would be well for us to follow, and since the passage of that law there has not been a water-power project developed under it.

Senator CLARK. He was citing it as a refutation of the claim that has been made that the Canadian laws were more liberal to the settler than the American laws, as I understood Mr. Finney.

Mr. FINNEY. I mentioned that in passing; yes, sir; and to show that they did vest material discretion in the administrative officers.

Senator WORKS. I thought, Mr. Chairman, it was understood that we would give Mr. Finney a chance to conclude his remarks. Sen-

ator Norris is excusable, because he was not here when the order was made.

The CHAIRMAN. There was no rule to that effect, but I simply requested the members of the committee, at the suggestion of Mr Finney, to allow him to conclude, and then if there were any questions he would be glad to answer them.

Senator NORRIS. I beg pardon if I have transcended any rule.

The CHAIRMAN. We had not adopted any rule, but Mr. Finney had simply requested that he be allowed to make his statement without interruption.

Go ahead, now, Mr. Finney.

Mr. FINNEY. I mentioned that one of the things we are endeavoring to do is to prevent monopoly; and by that I mean a monopoly injurious to the people. I am not going to take the time of the committee to express my views, but I think it is self-evident that if the ownership of the key to the situation, which is the power site itself, is retained by the Federal Government, that it would be more easy to control or prevent a monopoly than if that site was given in fee simple to that monopoly. It would be easier to control them. It would be easier to regulate them. It would be easier to take it away from them if they disobeyed the laws, and I think would have a tendency to insure good behavior on the part of those who are developing the resources.

According to a very conservative estimate, the developed water power of the United States is approximately 7,000,000 horsepower, and the undeveloped horsepower is estimated by some at 28,000,000 horsepower. Now, of those amounts, about 74 per cent is in what are known as our public-land States, and about 42 per cent is conceded to be within the limits of national forests. That shows the vastness of these resources and the importance of dealing carefully with them. Now, I want to call the attention of the committee to the fact, as shown by a statement by Mr. Harry A. Slattery, on page 625 of the House hearings, that 10 groups of power interests control 65 per cent of all developed commercial water power in this country.

Senator CLARK. That is, 65 per cent of the 7,000,000 horsepower?

Mr. FINNEY. Yes, sir.

On page 724 of the same hearings is a table and statement to the effect that in the State of California two corporations control 57 per cent of the total power development.

That situation, and the possibility that if the Federal Government absolutely parts with the key to this situation, which it now has—and, by the way, under the act of Congress approved June 25, 1910 (36 Stat., 847), the President had withdrawn in the neighborhood of, I should say, two or three million acres of public land, including these water-power sites, on the public domain, and of course there is a very large area of land available for power development in the national forests which was not withdrawn under that act because they are already protected by reason of the fact that they are in the forests.

Senator CLARK. How many acres in all did you say the President had withdrawn under that act?

Mr. FINNEY. I have not the exact figures. I think it is in the neighborhood of two or three million acres.

Senator SMOOT. I think it is more than that.

Mr. FINNEY. Have you the figures there, Dr. Smith?

Dr. GEORGE OTIS SMITH. I will get them. On June 30, 1,991,617 acres.

Senator CLARK. Does that include the withdrawals for all purposes?

Mr. SMITH. No; that simply includes the withdrawals for power sites.

Senator CLARK. I understood Mr. Finney to say it was two or three million acres in all?

Mr. FINNEY. No, sir. It is very much larger than that altogether. That act names specifically such purposes for which the withdrawals may be made, and then contains the words "other public purposes." There are various kinds of withdrawals, but I had reference to withdrawals of water-power sites only.

Now, there are, therefore, withdrawn from private disposition and reserved, pending consideration by Congress of this sort of legislation, considerable areas of land, and it is within the power of Congress to deal with a free hand as to what disposition or use shall be made of this land.

Senator SMOOT. They were temporary withdrawals, however, were they not?

Mr. FINNEY. The law states that they should be temporary.

Senator CLARK. May I ask a question right there? I want to ask just a question, Mr. Finney, but with your consent, of course.

Mr. FINNEY. I would be very glad to have you do so.

Senator CLARK. Have there been any cases of withdrawals after applications for rights of way have been made?

Mr. GEORGE OTIS SMITH. I might add that there have been, and in fact this is for the purpose of protecting an application for that right of way.

Senator CLARK. My question only referred to the fact.

Mr. SMITH. Yes.

Mr. FINNEY. I think there have.

Mr. SMITH. I so stated.

Mr. FINNEY. We have to deal more or less with power permits under existing law in the department, and we have been granting permits under the act of 1901 within lands that are withdrawn by authorizing the President to modify the withdrawal so as to permit the issuance of the application of So-and-so to develop the power resources.

Senator CLARK. Yes; but that was not exactly the point I made.

Mr. FINNEY. I know. Your point was whether there had been prior withdrawals after application?

Senator CLARK. Yes.

Mr. FINNEY. I can not see that that would affect the rights of the party, Senator. If one had applied for a power permit to develop lands that were embraced in a withdrawal, then his application was nevertheless approved, and it would not affect his rights in any way, prevent him from developing the land, but would protect him against the possibility of encroachment by others.

Senator CLARK. I had supposed that until the law became operative any rights that a man may have had prior to that withdrawal would have been fully recognized.

Mr. FINNEY. I am going to touch on that subject a little later, as to what rights are acquired by an application, or an offer to select.

Senator CLARK. All right.

Mr. FINNEY. While we are on that subject, I want to call the attention of the committee to the fact that, of course, under existing law, where a permission to use the right of way is granted, that does not withdraw the lands from entry or disposition. It might happen that a person has applied to obtain permission to use the land, and possibly after he has spent money on it some one else will put some scrip on the land or enter it under some one of the land laws. Whether under such circumstances the power applicant will be able to protect himself or not is a matter for determination by the courts. But a man who has an application now for power development is really protected by the withdrawal which the President has made, because it then prevents the entering of the land under some other law.

Senator SMOOT. That is not the purpose of the department.

Mr. FINNEY. No; that is not the purpose of the withdrawal. The withdrawal was authorized by Congress, and the lands were withdrawn pending consideration by Congress of legislation governing these sites. I do not know whether the question has been raised or will be raised before this committee, but I have heard questioned the constitutional right of the United States to lease lands or to permit their use under some such law as will deprive them from sale and disposition, and I have a three-page memorandum here, consisting principally of a compilation of Supreme Court decisions upon that point, and I am going to ask permission of the committee to place it in the record.

The CHAIRMAN. That will be put into the record if there is no objection.

(The memorandum referred to is as follows:)

CONSTITUTIONALITY OF LEASE LAWS.

This subject has been considered both directly and indirectly by the Supreme Court of the United States, and the constitutionality of such laws clearly sustained.

By act of Congress of March 3, 1807, Congress authorized the President to lease lead mines in Indiana Territory for terms not exceeding five years. In the case of the United States *v.* Gratiot et al. (14 Pet., 526) it was contended that Congress had no power to authorize leases of public lands and obtain profits from working of mines; that Congress can not delegate the power to lease public lands. The Supreme Court, in substance, held that the power over the public lands is vested in Congress by the Constitution, without limitation; that the words "dispose of" the public lands, used in the Constitution, can not, under the decisions of the Supreme Court, receive any other construction than that Congress has power to authorize the leasing of lead mines in the public lands in the Territories of the United States. The court further stated that the State of Illinois subsequently created out of a part of the Territory involved, "can not claim a right to the public lands within her limits. It has been the policy of the Government at all times, in disposing of the public lands, to reserve the mines for the use of the United States, and their real value can not be ascertained without causing them to be explored and worked under proper regulations."

In the case of Light *v.* United States (220 U. S. Rep., 536), the Supreme Court said:

"* * * the Nation is an owner, and has made Congress the principal agent to dispose of its property * * *." "Congress is the body to which is given the power to determine the conditions upon which the public lands shall be disposed of." (Butte City Water Co. *v.* Baker, 196 U. S., 126.) "The

...ernment has with respect to its own land the rights of an ordinary proprietor to maintain its possession and prosecute trespassers. It may deal with its lands precisely as an ordinary individual may deal with his farming property. It may sell or withhold them from sale." (Camfield v. United States, 167 U. S., 524.) And if it may withhold from sale and settlement, it may also as an owner object to its property being used for grazing purposes, for the Government is charged with the duty and clothed with the power to protect the public domain from trespass and unlawful appropriation." (United States v. Beebe, 127 U. S., 342.)

The United States can prohibit absolutely or fix the terms on which its property may be used. As it can withhold or reserve the land, it can do so indefinitely. (Stearns v. Minnesota, 179 U. S., 243.) It is true that the "United States do not and can not hold property as a monarch may for private or personal purposes." (Van Brocklin v. Tennessee, 117 U. S., 158.) But that does not lead to the conclusions that it is without the rights incident to ownership, for the Constitution declares, section 3, Article IV, that "Congress shall have the power to dispose of and make all needful rules and regulations respecting the territory or the property belonging to the United States." "The full scope of this paragraph has never been definitely settled. Primarily, at least, it is a grant of power to the United States of control over its property." (Kansas v. Colorado, 206 U. S., 89.)

"All the public lands of the Nation are held in trust for the people of the whole country." (United States v. Trinidad Coal Co., 137 U. S., 160.) "And it is not for the courts to say how that trust shall be administered. That is for the Congress to determine. The courts can not compel it to set aside the lands for settlement; or to suffer them to be used for agricultural or grazing purposes; nor interfere when, in the exercise of its discretion, Congress establishes a forest reserve for what it decides to be national and public purposes. In the same way and in the exercise of the same trust it may disestablish a reserve, and devote the property to some other national and public purpose. These are powers incident to proprietorship, to say nothing of the power of the United States as a sovereign over the property belonging to it * * *."

E. C. FINNEY.

Mr. FINNEY. Referring again to the question that Senator Clark asked about withdrawals after applications for rights of way, or possible application had been presented—that subject has been considered at length in the department, it being contended by some that an application for a right of way or an application to enter presented before a withdrawal precluded the making of a withdrawal, or, if the withdrawal was made, that it did not defeat the right of the applicant or entryman or selector. You will probably recall that the act of June 5, 1910, provided that such a law should not affect the rights of any homestead or desert-land entryman in connection with an entry theretofore made, or with any homestead settlement made prior to the withdrawal. That was the only exception named in the act, evidencing, apparently, an intention on the part of Congress that other claims should not be allowed to go to patent in the face of one of these withdrawals. Under those circumstances the department has felt that it had no right to pass those other claims to patent. I refer now to forest lieu selections, State selections, timber and stone applications, soldiers' scrip, and various filings of that kind. I say they have been suspended awaiting legislation, to put it shortly.

This bill contains a provision in one of its sections (sec. 10) in a proviso:

"Provided, that locations, entries, selections, or filings heretofore allowed for lands reserved as water-power sites, or in connection with water-power development or electrical transmission may proceed to approval or patent under and subject to the limitations and conditions in this section contained," subject to reservation in the patent

of the right of the United States or its grantee to occupy so much of the lands as may be necessary for water-power development.

Many of those applicants and entrymen have written to the department and stated that they do not object to a reservation of that kind, where there is simply a pressure pipe line running across their land, or where there are perhaps 3 or 4 acres down along a gulch which may be overflowed by a reservoir and would not deprive them of the use of the rest of the land. In the case of a timber right, all he wants is the right to cut the timber and remove it, and he does not care then if the land is overflowed afterwards.

That section was put in with the idea of protecting, in part, at least, those power site applicants.

I have looked the matter up very thoroughly, and I am satisfied that under the decisions of the courts the mere offer to select lands, the mere inchoate claim, does not prevent Congress from withdrawing the land or taking the land for public use.

Senator CLARK. I do not think there is any question about that.

Mr. FINNEY. I have quite a lengthy memorandum on the subject, and if the committee desires I will put it in the record.

Senator CHAMBERLAIN. I would like to have it put in.

The CHAIRMAN. We will put it in.

(The paper referred to is as follows:)

MEMORANDUM.

It is my understanding that the question at issue, primarily, is the effect of withdrawals made under the act of June 25, 1910 (36 Stat., 847), upon the rights or claims of persons who prior to the withdrawal, had made settlements, filings, selections, or entries, but who had not received final certificates of entry, the approval of the department, or such other action as indicated the vesting in them of the equitable title to the land. Omitting for the present all discussion of equities obtained through the initiation of such claims and confining ourselves strictly to the legal view of the matter, I find in the decisions two principles clearly laid down: (1) That where a settler, selector, or entryman has regularly initiated his claim in accordance with law and has continued compliance therewith, his rights can not be divested by the giving or granting of the lands to another. In other words he has a preference right as against all other citizens to complete and acquire title to the land; (2) that by the mere initiation of a claim he acquires no vested right against the United States, and that it, acting under its sovereign or governmental capacity, may take and use his land for a public purpose, notwithstanding that this taking may deprive him of equities theretofore acquired and existing. The first principle is founded upon equity and substantial justice and upon the theory that before the Government the rights of all qualified citizens are equal and that consequently the first in time is the first in right; that the later applicant or settler will not be permitted to deprive the prior one of the fruits of his diligence. Examples of preference rights thus conferred as against other citizens are found in the act of May 14, 1880 (21 Stat., 140), section 2 of which grants to a successful contestant a preference right to enter the land as against others, and section 3 of which grants the homestead settler upon unsurveyed lands the preference rights as against others to enter those lands when surveyed. The same principle applies with respect to the filing of selections or of applications to enter, not only under the law but as a matter of good administration. The first in time is accorded the prior right and his filing or entry is given a segregative effect, the land department declining to receive other and later filings for the same land during the pendency of the first filing or entry.

There is a clear distinction between such initiated claims, however, and vested rights. An equitable title or a vested right is acquired by a settler, selector, or entryman only when he has performed all of the acts prescribed in order to make a title, has furnished proof thereof to the land department, and has received, or is lawfully entitled to receive, evidence of this fact in the form of a final certificate of entry or formal approval. In the latter class of

...he has earned the right to a patent, and were it not for the delays incident ... examination or review, the taking up of cases in their regular order, and the ... labor of issuing patents, he would receive his patent or evidence of title ... moment. The following decisions are illustrative of cases where the ... title may be said to have passed or a right to have vested, and it is of ... to note the conditions presented to the court in each instance:

... Emerson v. Duncan (4 Wall., 210) involved a donation entry upon which ... certificate had issued as a basis for patent, and the court held that after ... execution and delivery of that certificate of entry the land ceased to be a ... of the public domain, and the Government thereafter held the naked legal ... in trust for the purchaser.

... Hyde v. The State of Arkansas (9 How., 333), a preemptor had not only ... the cultivation and improvement required by law but submitted proof ... satisfactory to the register and receiver and tendered the price due. In ..., he had done all he could to perfect his right to the title. Furthermore, as ... out by the Supreme Court in a later case, the question involved was ... the preemptor's legal right as against other parties to be preferred in the ... of lands the United States had determined to sell, and was not as ... the United States itself.

In the case of Garland v. Wynn (20 How., 6) the issue was between two ...

In the case of Worth v. Branson (98 U. S., 121) the court held that where ... claimant had done all that was necessary to entitle him to a patent, he ... entitled to be regarded as the equitable owner thereof and the land is no ... open to location, and that "any subsequent grant of the same land to ... party is void.

Steffenbeck v. Hawke (115 U. S., 392) was a case where a mineral claimant ... complied with all the requirements of the law and final certificate had ... issued to him, which certificate the court said was, "so far as the acquisition ... by any other party was concerned, equivalent to a patent."

Cornelius v. Kessel (128 U. S., 461) is to the effect that when a tract of land ... purchased and paid for, the purchaser secures a vested interest and a right ... patent. The same state of facts existed in Benson v. The Alta Mining ... (145 U. S., 432).

In Hardon v. Northern Pacific Railway Co. (145 U. S., 523) preemption claims ... at date of definite location of the railroad were, by the terms of the ... to the railroad, expressly excepted therefrom and the effect of the ... under the applicable law was held to segregate the land from the ... domain and exclude it from the operation of the company's grant.

Hastings v. Whitney (132 U. S., 364) involved a homestead entry existent ... of record at the time when the grant to the railroad company would have ... attached, and the court said so long as such an entry remains of ... of "it is such an appropriation of the tract as segregates it from the ... domain and therefore precludes it from subsequent grants." Primarily, ... referred to the grant to the railroad, but the principle would be applicable ... grant or disposition to any other private citizen or corporation.

The Detroit Lumber Co. case (200 U. S., 321) dealt with entries upon which ... had been submitted and final certificate and receipt issued and the ... said the receipt is an acknowledgment by the Government that it holds ... title in trust for the entryman and will in due course issue to him a ... He is the equitable owner of the land.

Every one of the foregoing cases is clearly distinguishable, both as to the ... involved and in the principles announced, from that class of cases which ... with the right of Congress to take lands to which inchoate rights exist ... public purposes. The latter class of cases does not involve discrimination ... favoritism as between citizens, but under the principle announced in them the ... right of the citizen may be taken for the use or benefit of all citizens.

Frisbie v. Whitney (9 Wall., 187) is to the effect that occupation and improvement on the public lands under the preemption laws, while conferring a preference over other citizens to purchase the lands, do not confer a vested right ... preemptor or deprive Congress of the power to withdraw the land from ... entry. This conclusion was reached by the Supreme Court after full ... consideration of the case before it, of the opinions of the Attorney General of ... United States (8 Ops., 72; 10 Ops., 57; 11 Ops., 462), and of decisions of ... supreme courts of Missouri, Mississippi, Illinois, and California, all of ... reach the same conclusion as that announced by the Supreme Court in ... Frisbie case. In that case the argument was advanced that the preemptor

had done all that it was in his power to do at that time toward perfecting h
claim and to his plea the court replied as it did in Rector v. Ashley (6 W.
142), that the rights of a claimant are to be measured by the acts of Congre
and not by what he may or may not be able to do, and if a sound construct
of these acts shows that he had acquired no vested interest in the land the
as his rights are created by the statutes, they must be governed by their pro
visions, whether they be hard or lenient.

In the Yosemite Valley case (15 Wall., 77) the court reiterated the same pri
ciple and pointed out a misapprehension of the effect of the court's decis
in Lytle v. Arkansas (*supra*), which then existed and still appears to exi
There were two differences between the Lytle case and the cases of Frisb
and the Yosemite Valley. In the Lytle v. Arkansas case Cloyes, the preempto
had performed the cultivation and improvement required, he had submitted h
proof, which had been accepted by the register and receiver, and he had te
dered the purchase money, as required. Furthermore, as stated by the cou
in the Yosemite case, there is a distinction "between the acquisition by th
settler of a legal right to the land occupied by him as against the owner, th
United States; and the acquisition by him of a legal right as against othe
parties to be preferred in its purchase, when the United States have determine
to sell." The court regards as an absurdity the claim that a person who h
acquired a right to be preferred in the purchase of property "provided a sa
is made by the owner, thereby acquires a right to compel the owner to sell, o
such an interest in the property as to deprive the owner of the power to contro
its disposition."

The case of United States v. Hanson (167 Fed., 881) involved a settlemen
made and maintained upon unsurveyed lands under the homestead laws whic
held out to such a settler the right to acquire the lands after survey in prefer
ence to others, but the court held, citing numerous decisions of the Supreme
Court, that "there is nothing in the essential nature of the acts of entering upo
unsurveyed public lands, residing thereon, and improving the same with the
intention of entering the same as a homestead, to confer upon the settler any
vested right or any kind of claim to the land, and such acts create no impedi
ment to the power of the Government to devote the land to any public purpose."
(Shiver v. United States, 159 U. S., 491.)

In Russian-American Co. v. United States (199 U. S., 570) the Supreme Court
again lays down the principle that a preemption settlement and occupation
confers a preference right as against other individuals but that "it does not
confer a vested right as against the United States in the lands so occupied.
Such a vested right under the preemption laws is only obtained when the pur-
chase money has been paid and receipt from the proper land officer given to the
purchaser. Until this has been done it is competent for Congress to withdr. w
the land from entry and sale, though this may defeat the inchoate right of the
settler."

The same distinction is noted in the decision of the Supreme Court in Union
Pacific v. Harris (215 U. S., 386), where the court said:

"While the power of Congress over lands which an individual is seeking
to acquire either under the preemption or the homestead law remains until the
payment of the full purchase price required by the former law or the full occu-
pation prescribed by the latter, yet under the general land laws of the United
States one who having made an entry is in actual occupation under the pre-
emption or homestead law can not be dispossessed of his priority at the in-
stance of any individual."

Again, in Stalker v. the Oregon Short Line (225 U. S., 142), the Supreme
Court, referring to railroad and State indemnity selections, states:

"In both classes of cases it has been many times ruled that while no vested
right against the United States is acquired until the actual approval of the
list of selections, the company does acquire a right to be preferred over such
an intervener. In other words, the patent when issued relates back to the
initiatory right and cuts off all claimants whose rights were initiated later."

The case of Crozier v. Krupp (224 U. S., 290), a patent case, also sustains
the view that the Federal Government has the right to appropriate property
rights for a public use.

The Attorney General, in the case of the Soscol Ranch (11 Ops., 490), said:
"It is not to be doubted that settlement on the public lands of the United
States, no matter how long continued, confers no right against the Govern-
ment."

The foregoing cases establish the legal right of the Federal Government to withhold for a public use lands covered by inchoate claims any time prior to the time when the citizen has acquired the equitable title or a vested right. The following decisions illustrate how and when such a right is acquired:

In the case of Cornelius v. Kessel (128 U. S., 456), right vested upon the [illegible] entry and payment of the purchase price fixed by law. See to the same effect Deffenback v. Hoyt (115 U. S., 392); Benson v. Alta Co. (145 U. S., 132); United States v. Detroit Lumber Co. (200 U. S., 337); Wisconsin Railroad v. Price County (133 U. S., 496), involved railroad selections, and the court there held that the approval of the Secretary of the Interior was essential to the validity of the selections and to give the company any title to the land; that until the selections were approved there were no selections in fact, only preliminary proceedings taken for that purpose and the indemnity lands remained unaffected in their title."

In Weyerhaeuser v. Hoyt (219 U. S., 380), the court, considering a railroad selection, held that no interest is acquired in indemnity lands until a selection is made with the approval of the land department. It further stated that when approved its right would relate to date of selection, but, as pointed out before, its right, prior to such approval, was one to be referred as against subsequent applicants or claimants for the same land.

In Cosmos v. the Gray Eagle Oil Co. (190 U. S., 301), involving a forest lieu selection presented under the act of June 4, 1897, the court held that the [illegible] title to, or a vested interest in, selected land did not accrue until the approval of the selection or offer to exchange by an officer of the Land Department clothed with authority to make such approval and consummate the transaction, and it further held that the mere filing of the papers in the local land office can not create such a title or interest. The decision last cited was quoted and followed by the United States Circuit Court in the case of Clearwater Timber Co. v. Shoshone County (155 Fed., 612), the court saying: "Indeed, as construed this decision, it is not only conclusive that equitable title does pass to the applicant upon approval by the General Land Office, but also that it does not pass until such approval is given."

In Boughton v. Knight (219 U. S., 537) the Supreme Court, considering the same act of Congress, states that to take advantage of the proposal for an exchange contained in the act the applicant must not only select the land he wishes and file a relinquishment of the land surrendered, but that "manifestly there must be an acceptance of the relinquishment by some one authorized to act upon its sufficiency and an assent to the particular selection made in lieu."

In the case of Kern Oil Co. v. Clarke (30 L. D., 550) the department, considering a forest lieu selection, said that where a person making a selection under the act of June 4, 1897, has complied with all the terms and conditions necessary to entitle him to a patent he acquires a vested interest in the selected land. This decision, which was construed to mean that if a selector offered a proper base, reconveyed same, and filed the necessary evidence thereof in the local office, together with application to select a specific tract of land, he, from and after the date of this filing and its notation by the register and receiver, acquired this vested right. This decision has been overruled by the department and is not in accord with principles laid down by the courts in the cases hereinafter cited.

In Miller v. Thompson (36 L. D., 592), involving a forest lieu selection, the department held that until the Land Department has determined the questions of law and fact involved in an offer to exchange and a formal approval of the selection has been given the equitable title to the land does not pass from the Government. To the same effect is decision in case of Walker (36 L. D., 495) and Sherar v. Veazie (40 L. D., 549). This conclusion is in exact accord with the principles announced in Clearwater v. Shoshone County (155 Fed., 624), Cosmos v. Gray Eagle Oil Co. (190 U. S., 301), and Daniels v. Wagner (205 Fed., 355). In the latter case the United States Circuit Court of Appeals said: "The right of selection of lieu land given in the act of June 4, 1897, however, is in the first instance but an offer by the Government to exchange lands. It is based upon no valuable consideration actually received. It attaches to no specific lands nor to lands within any defined limits. It does not attach upon the mere presentation of the requisite papers. It attaches only when the authorized officers of the Government accept the offer of exchange. Nor is it true that the filing of the lieu selection papers and the acceptance of the same by the local land officers segregates the land upon which the filing is made so as to cut off intervening and subsequent rights as against the lieu selectors."

The court then cites Roughton v. Knight and Cosmos v. Gray Eagle Company (supra), saying, with reference to the latter case:

"It is urged that this language of the court is dictum, but we do not regard it. It contains the reasoning of the court in determining the nature of the rights of the complainant in that case. But if, indeed, it is true that the expression of such views was unnecessary to the determination of the case which was before the court, the language used sets forth the mature and unanimous judgment of the members of the court on the question of law which is involved in the case at bar, and we deem it controlling in the decision of the present case."

With reference to school indemnity selections, the department held in case of State of Colorado (32 L. D., 479):

"Until the selection is approved by the Secretary of the Interior there is in fact no selection, only preliminary proceedings looking to that end."

The same principle is announced by the department in case of Edward Jones, involving lands in Utah, decision August 31, 1904, unreported.

In Stalker v. The Oregon Short Line (225 U. S., 149) the court, referring to both railroad and school indemnity selections, said:

"In both classes of cases it has been many times ruled that while no vested right against the United States is acquired until the actual approval of the list of selections, the company does acquire a right to be preferred over such an intervener."

In Wisconsin Railroad v. Price County, speaking of railroad selections, the court said:

"The approval of the Secretary was essential to the efficacy of the selections and to give the company any title to the lands selected. His action in that matter was not ministerial, but judicial."

As intimated at the outset, the decisions hereinbefore cited, to my mind, conclusively establish (1) that when a public-land applicant or entryman has acquired the equitable title or a vested right to a specific tract of land, he can not be deprived thereof by the United States or others; (2) that when an applicant or entryman has acquired a preliminary or inchoate claim or right to a tract of public land, he can not be deprived thereof in order that the land may be given or granted to another citizen because he is entitled to preference on account of his priority, but that lands to which such rights have accrued can be taken by the United States for a public use; (3) that where an applicant or entryman has earned his title by the performance of all requisite acts, proofs, payments, etc., he has acquired the equitable title or vested interest above mentioned, but that (4) where there remains anything for him to do, or where, as in the case of selections, there remains the necessity for approval by the Commissioner or the Secretary in the exercise of a judicial, not a mere ministerial, function, a vested right or equitable title has not been secured and the party has a mere inchoate right which Congress may take away for a public use.

The act of Congress of June 25, 1910 (supra), as amended by the act of August 24, 1912 (37 Stat., 497), specifically authorizes the President to withdraw any of the public lands of the United States "and reserve the same for water-power sites, irrigation, classification of lands, or other public purposes," such withdrawals to remain in force until revoked by him or by Congress. By the foregoing, withdrawals for water-power sites are classed as for "public purposes" and therefore occupy the same legal status and have the same effect as a withdrawal for a military post, lighthouse reservation, reclamation reservoir, or similar reservations for the public use or benefit. Section 2 of the act contains exceptions of certain classes of claims or lands which Congress specifically directed should not be affected by the withdrawals. The first exception is mineral land, which, it is specified, shall, notwithstanding the withdrawal or reservation, continue subject to exploration and purchase under the mining laws except as to four minerals—coal, oil, gas, and phosphates. The first proviso to the section also protects the rights of parties who were, prior to withdrawal, actually engaged in prospecting work upon specific lands for the discovery of oil or gas. The third proviso specifically excepts from the force and effect of any withdrawals made "all lands which are on the date of such withdrawal embraced in any lawful homestead or desert land entry theretofore made, or upon which any valid settlement has been made and is at said date being maintained and perfected pursuant to law." The succeeding clause of the section is to the effect that the exceptions shall not continue unless such entryman or settler continues to comply with the law.

The legal maxim, expressio unius est exclusio alterius, would seem to apply to the case. Congress has in express and no uncertain terms enumerated the lands, claims or rights to be excluded or excepted from the force and effect of withdrawals. The other inchoate claims not enumerated and saved in the act must, I think, be held to be defeated by the withdrawal for public purposes. There are good reasons for the exceptions which, in my opinion, induced Congress to make them. From the very beginning of the Government it has been the policy of Congress to reserve mineral lands from other disposition and to encourage their exploration and development under the mining laws, to the end that the minerals may be extracted from the lands and used or placed upon the market. Coal, oil, gas, and phosphates were not excepted, because Congress knew that the Department was recommending, and that there was pending in Congress, a bill providing an entirely new and different method for the disposition and development of those particular minerals. Homestead and desert-land entries and settlements are initiated and maintained under laws which require either the personal residence of the entryman upon the lands or the performance of specific improvements and cultivation by him. In other words, these entrymen had acquired equities occasioned by their acts upon the land in compliance with the laws under which initiated, and Congress recognized this by excepting them from the force and effect of the withdrawals. The foregoing reasons do not apply to State and railroad indemnity selections, forest lieu selections, soldiers' additional, scrip, timber and stone applications, and applications of like nature, under none of these laws are selectors or applicants required to live upon the land, to cultivate or improve the same. They are in the nature of exchanges or purchases, which, until fully consummated, do not pass the equitable title and do the selectors or applicants occupy the peculiar status of those homestead settlers and desert-land entrymen who live upon or have expended their money in permanent immovable improvements upon the land. Within the year preceding the enactment of this law there had been a great outcry in the papers before a committee of Congress because of the alleged attempt of the water-power trust to acquire title to valuable power sites through the filing of scrip, and I believe that Congress had this very thing in mind when it made the specific exceptions enumerated in the act and did not generally provide for the protection of all inchoate claims initiated prior to withdrawal. It is true that withdrawal act refers to public lands, but I think the decisions herein cited are conclusive on the point that inchoate claims do not vest in the selector or applicant the equitable title to the lands or confer upon him a vested right. If neither the legal nor equitable title to the land has passed from the United States then the lands are public lands within the meaning of that term as used in the act. As between the United States and its citizens, there is no "twilight zone" in this respect. The lands are either public lands of the United States subject to such disposition for the public use as Congress may fix, or they are the lands of the selector or applicant, to which he has acquired the equitable title and concerning which there only remains the ministerial duty of issuing the patent or other evidence of title. It is true, that by the initiation of these inchoate claims the selectors or applicants have acquired a right to be preferred as against other citizens if the United States shall dispose of the lands, but if Congress decides not to dispose of them, but to reserve them for a public use, Congress is only exercising a right which the courts have again and agin declared resides in that body. The contention that the act authorizing the withdrawal of "public" lands applies only to vacant tracts not occupied, filed on, or entered as perfected by the exceptions contained in the law, which would have been entirely unnecessary had the act applied only to lands to which no claim had been initiated.

E. C. FINNEY.

SUPPLEMENTAL MEMORANDUM.

Referring to memorandums heretofore submitted upon the question as to when the right of an entryman, selector, or claimant to a tract of public land becomes so far vested that it is beyond the authority of Congress to withdraw the lands involved for a public purpose, my attention has been directed to the cases of Bear Lake Irrigation Co. v. Garland (164 U. S., 1), Gonzales v. French (164 U. S., 338), and Emblen v. Lincoln Land Co. (184 U. S., 660), as warranting a different conclusion from those reached in the memorandums based upon the Yosemite Valley, Frisbie v. Whitney, and other cases. The law is clearly stated by Mr. Justice Peckham in the Bear Lake case (supra), as follows:

"Until the completion of this work, or, in other words, until the performance of the condition upon which the right to forever maintain possession is based, the person taking possession has no title, legal or equitable, as against the Government. What, if any, equitable claims a party might have upon the Government who did a large amount of work, but finally failed to complete the necessary amount to secure water or right of way, it is not necessary to determine or discuss. Those equities would not in any event amount to an equitable title to the right of way or to the use of the water, and so need not here considered."

This decision of the Supreme Court very definitely distinguishes between the position of a person who has "equities" and that of a person who has acquired an "equitable title." The first may, because of expenditure of time, labor, or money, or because of hardships undergone in connection with a particular tract of land, possess equities which may be recognized as an act of grace, but has not legal status enforceable as a matter of legal right. The second person, who has acquired an equitable title by the performance of all acts necessary to vest in him everything but the legal title conferred by a patent, has a right which can be legally enforced and of which he can not be deprived.

The cases of Gonzales v. French and Enblen v. Lincoln Land Co. (supra) contain certain expressions which, if isolated from the rest of the text, might be made the basis of an inference that after a man has paid the filing fees and made his initial entry he has a vested right which Congress can not take away, but that this is not the intent, effect, or holding of the decisions is shown by the fact that the court cites Frisbie v. Whitney, the Yosemite Valley case, and Shipley v. Cowan as authority, and states, in substance, that until all preliminary acts prescribed by the law for acquisition of title, including the payment of the price of the land, had been performed, the acts of Congress gave to the settler only a privilege of preemption "in case the lands were offered for sale in the usual manner," and that where a settler has acquired no vested interest in the land, "then, as his rights are created by the statutes, they must be governed by their provisions, whether they be hard or lenient."

The general principle that the United States has the right to withhold from private disposition for public use lands or things to which a right has not vested or concerning which the exchange or transaction has not been entirely consummated is supported by a decision of the Supreme Court, dated December 1, 1913, involving a case where a man named Goldberg was the highest bidder for a cruiser that had been stricken from the Naval Register under the act of August 5, 1882, and advertised for sale under the act of March 3, 1883. Goldberg bid more than the appraised value and sent his certified check for the sum bid. The bids were opened on the day fixed in the notice, and it was found that he had complied with all the conditions. His bid was the highest. The Secretary of the Navy, however, refused to deliver the vessel and returned the check. The court said:

"The answer admits the facts, but sets up that the bid is not an acceptance of an offer, but is itself only an offer subject to be accepted or not at the discretion of the Secretary, and that the Secretary never accepted the petitioner's bid, the Government having decided to lend the cruiser to the governor of Oregon for use by the Naval Militia of that State. The petitioner demurred, but the petition was dismissed on the ground that the discretion of the Secretary was not ended by the receipt and opening of bids, even though they satisfied all the conditions prescribed."

E. C. FINNEY.

Mr. FINNEY. Dr. Smith and other engineers and these practical water-power men can tell the committee in a very much better way than I can about the practical features of these measures. I do not want to take any more of the time of the committee unless the committee would like for me to run through the bill section by section.

The CHAIRMAN. It would not take very long, I imagine.

Senator THOMPSON. I would like to have you do that. I have not heard all your argument. I would like to have you make a general review.

Mr. FINNEY. I started yesterday with section 1.

Senator THOMPSON. Yes, sir; I heard that. Go ahead and cover the whole subject.

Mr. FINNEY. Briefly, section 1 proposes or authorizes the use of this land for a period of 50 years.

Senator NORRIS. Mr. Finney, I have a few questions I want to ask you, but I do not want to interrupt you. It occurred to me that you would like to have me ask those questions as you go along now.

Mr. FINNEY. I would like to have you do that.

Senator NORRIS. I understand you are through with your general statement?

Mr. FINNEY. Yes, sir. Briefly, section 1 proposes to permit the Secretary of the Interior to lease or permit the use of the public land and reserves for power development and transmission for not exceeding 50 years. There is a provision in here that a preference right shall be given to States, counties, or municipalities for municipal uses and purposes. That is the only preference which is contained in that section.

Then the concluding proviso authorizes the Secretary to grant preliminary permits for not exceeding one year to enable applicants to go upon the land and make their surveys and examinations to see whether they want to undertake the project, and so forth.

Senator NORRIS. Now, Mr. Finney, I want to ask you about the 50-year limitation. Why is the 50-year period selected?

Mr. FINNEY. It is rather an arbitrary period.

Senator THOMPSON. Is it not rather a lengthy period?

Mr. FINNEY. It is longer than is granted in many countries and States, and somewhat shorter than in others. I can tell you very briefly of a few of them. In France the term of such a concession, as they call it there, is 50 years. In Norway it says for at least 30 and not exceeding 80 years. In Ontario it is 20 years with the right of two renewals of ten years each. In Queensland, Australia, they allow development under what they call special licenses for periods of ten years each.

Senator NORRIS. What about New Zealand?

Mr. FINNEY. I have not been able to find what their measure is.

Senator THOMPSON. Do you not really think that, considering the changes in conditions and everything of that sort in this country, 50 years is a pretty long time for any right to be granted to anybody?

Mr. FINNEY. That was the subject of ag reat deal of discussion in the department and before the committee, and it seemed that 30 years would be too short a term to justify the investment required in connection with a water-power plant, and not only the investment, but the time consumed in building up a business would cut out a large part of the profits, and they would not go into it on such a short term.

Senator NORRIS. It seems to me that the length of the term itself, standing alone, is not so important except as to the regulation that comes under it.

Mr. FINNEY. Nor as to what shall happen at the end of that term.

Senator NORRIS. No. If there is a sufficient guarding of the public interests to prevent monopoly and to protect the consumer and the like I would not look so much to what the term was; but in this particular bill the 50-year term is, I presume, in its practical working a definite proposition and can not be revoked, but is irrevocable, except for certain causes.

Mr. FINNEY. Except for violation of the law for the expr terms of the contract.

Senator NORRIS. Would there be any way to revoke it if the co sumer, for instance, were not properly protected? How are y going to regulate the sale of the electricity so that there will not an overcharge to the man who uses it?

Mr. FINNEY. The bill leaves that to the State, where they ha provided public-service or other machinery, and where that has n been provided it proposes to place it in the officers of the Feder Government.

Senator NORRIS. So far as I am concerned I would not have an objection to the time being longer than 50 years, even if that prote tion was thrown around it and the proper officials given authority fix the charges, and not only the charges, but the service. There a two things, it seems to me, that the consuming public is entitled t One is that they shall not be overcharged, and the other is that th service shall be up to date and modern and proper service.

Senator THOMPSON. There has been a gross misuse, as you know, o these long franchises, as we call them, given to street railways an things of that kind, and the tendency now is to shorten the time in al cases of this kind.

Senator NORRIS. If those things are not properly safeguarded then we ought to make the term short.

Mr. FINNEY. If you will go through the bill I think you will find an attempt has been made to provide for regulation of all those things.

Senator THOMPSON. But conditions change so rapidly.

Mr. FINNEY. Over in section 9 it refers to the regulation of rates service, and the issuance of stocks and bonds; control of service and charges for service, and so forth. All those matters are touched on.

Senator NORRIS. I know they are touched on, but it does not seem to me that they are really fully protected, that the officers have sufficient power.

Senator THOMPSON. Would there be any possible objection to having the time reduced say to 25 or 30 years?

Mr. FINNEY. I do not believe you would get any money to put up these big plants that are necessary. There is required a great deal of work in building up a market, and capital, I think, would not come in on a short-term proposition.

Senator SMOOT. It takes 20 years many times to get a business of this kind established to even pay the running expenses. Men are not running around with money in their hands wanting to dump it in this business here just because of the fact that it is a power proposition.

Senator NORRIS. I have not looked into it, but I have been told that in New Zealand the time is unlimited, but that the franchise is so surrounded by safeguards that it can be terminated at any time if the consuming public are not properly protected and the service is not good or the charges are exorbitant.

Mr. FINNEY. The State of Wisconsin has made an indeterminate franchise for the development of water-power plants, but there is a string tied to that; and that is that the municipality or authorized subdivision may take over the plant at any time upon payment for it.

Senator NORRIS. Would that kind of a franchise bring forth money? That would get money at the very lowest rate, would it not?

Mr. FINNEY. My own personal view would be that it would not. I would not want to put money into an enterprise that I thought the State or city might take over next year.

Senator NORRIS. If you got your money out of it?

Mr. FINNEY. They would not get any profit.

Senator NORRIS. That would be, it seems to me, a guaranty.

Mr. FINNEY. The law always provides that they shall not get anything for good will and intangibles on the taking over by the Government.

Senator STERLING. This bill so provides, does it not?

Mr. FINNEY. Yes, sir. There is a provision in this bill to that effect. I can not see why anyone would want to invest in that kind of an uncertain proposition. That is one of the virtues of the bill we have here; that is, the fixed term. It is true some of the conditions are rather severe, but the power company that wants to undertake a development under this bill knows that unless it violates the law or some express provision of the contract it is going to be there for 50 years, and, at any rate, it can not be taken away from them in that period.

Senator NORRIS. The people who invest the money are the bondholders, I presume. Those are the people you are referring to. All they are entitled to is interest upon their money and the payment of the principle when it is due. Suppose the State takes it over, does that injure their security in any way?

Mr. FINNEY. They will not lose anything, except they will lose a good, safe, and permanent investment.

Senator NORRIS. If the State paid them off it would have to issue bonds to do it, and the State would assume the indebtedness and pay the interest, the same as a private corporation did, and when the time came it would pay the principal.

Mr. FINNEY. It probably would not pay as high a rate of interest if the State took it over.

Senator NORRIS. That would be a matter that would work itself out. If you got better security you would be willing to take a lower rate of interest.

Mr. FINNEY. A man who buys a bond of any kind would like to know that it is for a definite rate of interest and for a definite period.

Senator NORRIS. I do not see how they can fail to protect that. Suppose the bond ran for 50 years, and the State took it over?

Mr. FINNEY. The bond would probably bear 5 or 6 per cent interest, and the State would probably not be willing to pay that rate of interest, and they would probably pay these things off.

Senator NORRIS. If they did, they would pay them off on the same basis that some people are willing to lose some of the interest in consideration of the additional security?

Mr. FINNEY. You must admit, I think, that it would be a very uncertain tenure, at any rate. There would be but little encouragement for the plant owner to go out and develop business. In these Western States, in many places, they will have to make the business, because there is no market at the present time, and they will have to create a market.

Senator SMOOT. They will have to educate the people.

Mr. FINNEY. They will have to educate the people; yes. People are not going to do that if there is a possibility that as soon as they have been successful in their campaign and get a nice business built up it is going to be taken away from them.

Senator NORRIS. It would not require a very extensive education to convince the people. If they could get electric lights for 3 cents per kilowatt hour they would rather have it than pay 5 or to pay 10 cents, it seems to me.

Senator CLARK. Mr. Finney, I want to ask you whether you have any data in connection with this bill to show what is the net revenue of the various water companies which control the water supply, by water power; that is, the various electric companies; what their dividends have been in the past?

Mr. FINNEY. I have not that information.

Senator CLARK. I thought perhaps you might have that data in connection with fixing the light fee.

Mr. FINNEY. Mr. Merril, the chief engineer of the Forest Service, who is very familiar with that service, says that data is not available. Possibly some of these gentlemen representing the power companies may be able to give you some information on that.

Section 2 simply provides for the diligent, orderly, and reasonable development of the project and contains a concluding clause that the lessee shall at no time contract for the delivery to any one consumer of electrical energy in excess of 50 per cent of the total output.

The purpose of that is obvious, of course. It is to prevent a generating company from handing over the entire output to a single corporation or individual if there is a demand from others in the neighborhood for the power.

Senator SMOOT. Is it not true, Mr. Finney, that in many sections of the country water powers are developed for the very purpose of furnishing power to perhaps one large manufacturing concern, or for the development of a mine, and that it may, of course, supply small cities that may be adjacent to that plant?

Mr. FINNEY. I think that is probably true, but those are very small developments.

Senator SMOOT. Take it in my own State, we have the Beaver project that was started for the very purpose of furnishing power to the Newhouse mines.

Mr. FINNEY. I personally think here is a place where there should be some discretion left in the executive officers.

Senator SMOOT. There must be some discretion. I can name many cases such as that, where it would be absolutely impossible to use the power if it were not for the use of the power for the mines, for instance, as in the case at Beaver. They could not pay the running expenses of the plant itself from what they might sell the power for, and that certainly must be modified in some shape.

Mr. FINNEY. I think you are right, and it seems to me that by putting in there "shall at no time, except with the consent of the Secretary," or whoever it is decided shall have discretion in such cases.

Senator NORRIS. Up in Montana the Milwaukee road is operating by electricity. I presume there is an instance where they use all the power generated at that plant.

Mr. FINNEY. I think they transmit power 400 miles; that is, 200 miles in each direction.

Senator NORRIS. I think they have sold power to other people. I believe they get their power from Great Falls.

Senator THOMPSON. It might be well to vest discretion in the Secretary.

Senator NORRIS. Of course the object sought in section 2 is a very good one, but there are exceptions to that, and there must be some regulation, and we must leave discertion with some one.

Mr. FINNEY. Section 3 deals with regulation, providing that where the development, generation, transmission, and use of power or energy under such a lease is in a Territory, or in two or more States, the regulation and control of service and of charges for service to consumers and of the issuance of stock and bonds by the lessee, is conferred upon the Secretary of the Interior or committed to such a body as may be provided by Federal statutes.

Then the next clause deals with physical combination of plants, or lines for the generation, distribution, and use of power or energy, and permits a physical combination in the discretion of the Secretary of the Interior. That, of course, enables two plants to tie up in order that one may keep the other running in case of a breakdown, or where there are other advantages in the particular case in physical connection.

Senator NORRIS. In the first clause, Mr. Finney, suppose the power was generated in one State and its use was or could be very reasonably in another State.

Mr. FINNEY. I think that is an interstate matter then.

Senator NORRIS. Is not that true in nearly every large power scheme that would be developed anywhere that it would become interstate on that ground?

Mr. FINNEY. I hardly think that is true in every power project. Take a State like California, for instance. There a large part of the power developed goes to the west, toward the coast, and is used within the limits of the State. Over on the other side of the mountains there are perhaps a few power projects that go out of the State.

Senator NORRIS. I do not know that it would be undesirable, but would it not be possible for the power company to pretty nearly decide whether it wanted to be a State instead of an interstate project? They could, even in California, run a wire and sell some electrical energy in some other State.

Senator CLARK. That is provided for in this bill—the transmission of power.

Mr. FINNEY. That is covered; and of course, as to the power they transmitted into another State, that would be interstate.

Senator NORRIS. Let me get your definition. It is interstate, I suppose, when the electric energy is generated in one State and passes out of that State into another?

Mr. FINNEY. So far as the transmission is interstate. I do not understand that it would be interstate as to other power that was generated and disposed of wholly in the State.

Senator NORRIS. Suppose a power plant were located in the State of Montana, but they sold some electric energy in the State of Idaho, we will say, an adjoining State. Now, then, would you say that only

the Idaho part of that is interstate and the part disposed of in Montana would be under the control of the municipal government?

Mr. FINNEY. I would say that the power that went into Idaho would be interstate? I think that the power generated in Montana and sold in Montana would be intrastate. As to the stock and bond issue—I presume that is what you are getting at?

Senator NORRIS. No; not necessarily.

Mr. FINNEY. I do not find any difficulty with the question of the rates to the consumer, because the Federal authority will control the rates on that power that really is interstate, that goes over the line, that can be measured, metered; and the Montana public service commission would control the power generated in Montana and sold in Montana.

Senator NORRIS. That is where it seems to me we would get into difficulty. That is all generated in one place, and one power, the Federal power, is going to fix the price for the sale of part of it, and the State is going to fix the price for the sale of another part of it, and it seems to me there is where we would get into difficulty at once.

Mr. FINNEY. Would there be any difficulty in a case where they would be under Federal control?

Senator ROBINSON. Will you permit an interruption, Senator Norris?

Senator NORRIS. Yes, sir.

Senator ROBINSON. Would not the same rule apply as in the case of intrastate and interstate transportation? The Federal Government controls interstate transportation and the State control intrastate transportation.

Senator NORRIS. No; I think it is quite different, because in this case your source of power—the electric energy—is all generated in the State, and is controlled by the State commission.

Senator ROBINSON. What difference does it make? It is measured, absolutely.

Mr. FINNEY. Exactly. It is measured.

Senator NORRIS. It is measured, but on one side of this imaginary line the State of Montana fixes the price at a certain amount, and on the other side, for the same power, generated at the same place, but transmitted over the line somewhere, the Federal Government fixes the amount. There is where you get into trouble.

Senator ROBINSON. That is true of railroad rates.

Senator NORRIS. No.

Senator ROBINSON. Sure it is.

Senator NORRIS. The railroad, its engine and its track and everything, including its power, is all generated in the State.

Senator CLARK. Not always.

Senator NORRIS. If it is transmitted by electricity it is not, but if you work it on an engine it is always.

Senator STERLING. It seems to me the next clause there presents greater difficulty than the transmission of the power from one State to another, where it says:

"And the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior."

That presents a greater difficulty than the mere transmission of power.

Senator NORRIS. If you will just think a minute, Senator, it seems to me that with this proposition that you have in here, of just an imaginary State line, a plant could be erected on one side of the street and another plant on the other side of the street engaged in the same business, manufacturing the same product that is sold, and the State authorities fix the price of power on one side of the street and the Federal authorities on the other, unless we assume that they would always come together and fix the same price, and it seems to me we are going to have a great deal of trouble.

Senator ROBINSON. Is not that analogous to the case of freight rates on a railroad that runs from one State into another?

Mr. FINNEY. It seems to me to be so.

Senator ROBINSON. What is the distinction there in practice or in principle?

Senator NORRIS. In the one case, for instance, in the case of electric energy, the power is just as much connected with the one as it is with the other and is all generated in one place under the control of the State authorities.

The CHAIRMAN. We will take a recess to 10 o'clock a. m.

(Whereupon, at 11.45 o'clock a. m., the committee took a recess to 10 o'clock a. m., Friday, December 11, 1914.)

WATER-POWER BILL.

FRIDAY, DECEMBER 11, 1914.

COMMITTEE ON PUBLIC LANDS,
UNITED STATES SENATE,
Washington, D. C.

The committee met at 10 o'clock a. m.

Present: Senators Myers (chairman), Robinson, Chamberlain, Smoot, Clark, Works, Norris, and Sterling.

Present also Senator Shafroth.

The CHAIRMAN. The committee will come to order. Mr. Finney, you may go ahead with your statement.

STATEMENT OF MR. EDWARD C. FINNEY—Continued.

Mr. FINNEY. I think I had just finished talking about section 3, in relation to the regulation of service and rates.

Section 4 is to the effect that no sale or delivery of power shall be made to a distributing company unless it be on the written consent of the Secretary, except where there is an emergency; then, for a period of not exceeding 30 days, sales can be made without obtaining permission.

Senator WORKS. Mr. Chairman, Mr. Finney's going over these particular sections is particularly at the instance of the Senator from Kansas, and I think he ought to be sent for.

The CHAIRMAN. He has just been sent for.

Senator WORKS. So far as I am individually concerned, I do not care about Mr. Finney's going over these sections in detail.

Senator NORRIS. I would like to have him go over them.

The CHAIRMAN. It will be in the record and can be read afterwards.

Mr. FINNEY. I will be through in a very few minutes.

Senator WORKS. You said yesterday morning that you would only take about 10 minutes.

Senator NORRIS. Well, we were to blame for that.

The CHAIRMAN. Go ahead, Mr. Finney.

Mr. FINNEY. The object being to cut out, so far as possible, the middleman, as it were, and to prevent an increase in the rates and charges, etc., by means of selling out all of the power to a distributing company. At the same time, it is deemed advisable that there should be latitude allowed the Secretary to permit such sales. There are many instances where it would be advantageous to the public and to the companies.

Senator SMOOT. Such a requirement would only tend to build up another bureau, would it not?

Mr. FINNEY. Of course, that is a matter for Congress to settl Senator. And it would depend largely, also, on the number power permits that were issued under this law. There are compar tively few of them at the present time. I think the present force the department could handle them. But if there ever becomes large amount of business carried on it would be necessary to increa that force or to create some other body.

The proviso in that section relates to liens, etc.

Section 5 relates to what is called the recapture or taking over the end of the 50-year period. That has to be at three years' notic to the grantee, and that notice may be given at the end of 47 year and it would not become operative until the end of the 50 years.

The conditions cited in here for the taking over by the Govern ment or making a new lease to a third party, as provided in the fol lowing section, are:

> That it shall pay, before taking possession, first, the actual costs of right of way, water rights, lands, and interests therein purchased and used by the lessee in the generation and distribution of electrical energy under the lease.

Of course, for the Government lands which are permitted to be used nothing is paid. This relates to the matters which he buys such as easements or rights of way for the construction of transmission lines, etc. It was thought that the actual amount that he paid out should be reimbursed; that is, that we should reimburse him for the actual outlay, but at the same time we did not think the public should pay for the unearned increment which might occur during the 50-year period, and which it is thought might prevent the taking over by reason of increasing to such a vast amount that the municipality or State would not be willing or able to pay the price.

As to the other features, the section provides in lines 7, 8, and 9 that the reasonable value of all the property taken over shall be paid—that includes the buildings and fixtures.

The proviso to the section is to the effect that the reasonable value shall not include franchises, good will, profits to be earned on pending contracts, or any other intangible elements.

Some of the power people suggested that those words, "intangible elements," might cut them out from legitimate things, such as expense of early development, expense of raising money, expense of preliminary surveys, and so forth. The department would not have any objection to amending the proviso to read something like this:

> *Provided*, That such reasonable value shall not include or be affected by the value of the rights and franchises granted, or good will, going value of actual or prospective revenues, profits, or dividends.

That cuts out the word "intangible."

Senator NORRIS. Mr. Finney, I wanted to ask you about that amendment.

It seems to me it would be fair to take into consideration these early expenditures, preliminary surveys, etc., if they have not already been taken care of at the time of taking over; but is this not true, as a rule, that any concern of that kind—any public-utility corporation—takes care of those if they have been in operation any considerable length of time?

Mr. FINNEY. They take care of it out of their profits, you mean?

Senator NORRIS. Out of their profits; yes. If it has once been taken ... of and they have been paid for it, it ought not to be valued again.

Senator SMOOT. The rate of charge may be such through regula... that it would be impossible to take care of it.

Senator NORRIS. It might be, and in that case it ought to be added.

Senator SMOOT. I think myself that the amendment is a great im...ement upon the ambiguous terms as provided in the bill.

Mr. FINNEY. That was the complaint, namely, that the term "in...gible" was indefinite and might cut out something that they were ...timately entitled to be paid for.

Senator NORRIS. Without that amendment it might be possible to ... paid for those things you mentioned twice.

Mr. FINNEY. Some of the laws of the States which provide for ...ing over do contain the term "intangible"; but it does seem that ...t is very indefinite, while this other specifies exactly what ele...nts shall not be considered.

Senator NORRIS. Now, I have in mind an instance or two that I ...e some personal knowledge of where property was valued and ...t value was considered, but on investigation it was shown—it had ...en in operation, it is true, a great many years—that they had fully ...mpensation themselves for all the preliminary surveys and expenses ... organization and everything.

Senator CLARK. That would simply result in this, would it not, Senator, that they would get a lesser dividend than they otherwise would have paid?

Senator NORRIS. You can tell it from the dividend. It comes out ... that way. In the instance I am speaking of they had dividends declared in one year of something like 50 per cent. That would take ...re of a great many preliminary expenses on a capitalization of $1,000,000.

Mr. FINNEY. I doubt anyway whether this would prevent the United States from taking over. The court, if it finally got to the ...urt, could eliminate the value which had already been returned to the company if it so desired. This is a sort of prohibition here, you ...e. It says that certain things shall not be taken into consideration. There might be other elements which the Government or the court, ... the taking over, might refuse to allow on the theory that they ... already been taken care of.

Section 6 relates further to the taking over, and says that if the United States shall not exercise its right to take over the properties ... does not renew to the original lessee upon such terms and condi...ons as may then be authorized by law, the Secretary may lease to a ...rd party. That is upon condition that the third party reimburse ... original grantee in the same manner as provided by section 5.

So there are really three possibilities expressed here that may take ... at the end of 50 years: One is the taking over by the Govern...nt; the second is the renewal of the grant to the original corpora...on or individual; and the third is to lease it to some one else.

As I have already said, at the end of 50 years conditions may be so radically different that we may want to adopt some other method of granting, handling, or disposing of these power sites.

Section 7 authorizes the execution of contracts by grantee for ...eriods extending beyond the life of the lease, but stipulates that that ... will not be for more than 20 years, and that there shall be an ap-

proval of such contracts by the Secretary. The new lessee, or the United States, if it takes over the plant, is to assume and fulfill those contracts.

Senator SMOOT. That would interfere, however, in a case where a large manufacturing concern contracted for power and upon the price of the power depended the fact of whether they should continue in business or not. It seems to me it would interfere with a proposition or concern of that kind. They may want perpetual power, and must have it in order to make a profit. Under this arrangement a plant of that kind would not establish itself.

Mr. FINNEY. You think they would have to have a perpetual contract?

Senator SMOOT. Yes, sir. For instance, there are many industries whose profit is so small that a slight increase in the price of power would prevent that profit—eliminate it entirely. They would not build or would not start manufacturing unless they had a perpetual power right.

Mr. FINNEY. I can not state positively, Senator, but I doubt whether very many existing corporations give perpetual contracts for power. I am inclined to think that most of them are limited. It is true they may be limited to 50 years, or possibly 99 years, but I doubt whether there are very many perpetual contracts.

Senator SMOOT. A 99-year contract is equal to a perpetual right.

Mr. FINNEY. If they started in at the beginning of the lease the term would be 50 years plus 20. That would be 70 years.

Senator SMOOT. That is not what the section means. The section means this: Supposing after the power plant has been running forty years some one wants to make a contract for power. It would then be impossible to make a contract, under the provisions of this bill, for more than 30 years.

Mr. FINNEY. That is correct.

Senator SMOOT. Or, if it has been running 45 years, the limit of the contract to be made would be 25 years.

Mr. FINNEY. That is absolutely correct.

Senator SMOOT. I do not apprehend that it would interfere at the beginning of the working of this, if it ever becomes a law, but I do apprehend that such a provision would work a hardship toward the end of the 50-year period.

Mr. FINNEY. Of course there is this fact to be taken into consideration: If the plant is there and somebody is operating it it is presumed that the customers may be able to get power; although, as the Senator has said, there is a possibility of the price being increased. However, it was thought it would be unwise to permit the entering into perpetual contracts which might destroy the very purposes of the bill and tie up the thing forever. That was the reason for putting in this provision.

Section 8 relates to the charges to be made and their distribution.

Senator CLARK. I want to ask you one or two general questions on that, Mr. Finney.

In considering this matter— and it has, of course, received very careful consideration by the department—have you considered at all, from any data that you may have gathered, what the limit of charges might be per horsepower, either the minimum or the maximum, from any information that the department has received from existing concerns?

Mr. FINNEY. Well, we, of course, have been making some charges in the past, both in the Interior Department and in the Department of Agriculture. I think they run up there from a minimum of 10 cents to a maximum of $1 per horsepower. Is that not correct, Mr. Merrill?

Mr. MERRILL. It is correct, if you consider on what horsepower the terms are made—the minimum.

Senator CLARK. I do not just get that.

Mr. MERRILL. The Agricultural Department charges $1 per horsepower on the minimum output.

Senator CLARK. They do not charge on the actual output?

Mr. MERRILL. No, sir.

Senator CLARK. What is the proposition here, Mr. Finney, to charge on the actual power developed or sold?

Mr. FINNEY. This does not state, Senator.

Senator CLARK. I know, but what I was trying to get at is what is contemplated by the bill, because that is quite important.

Mr. FINNEY. I do not speak with authority, but I have heard the Secretary frequently speak of this matter, and I think it is the policy of the department not to seek to make this a revenue measure, so that I am very sure that any charges that are made will be extremely low.

Senator CLARK. Let me ask you another question. It has been the experience that while some of the charges made in other branches of the service are not revenue producing in the sense of being profit producing, still they are extremely burdensome on the consumer. As an instance, I will cite the Forestry Service. In some cases while the charges there are not sufficient to meet the administration expenses, yet they are extremely burdensome in some instances on persons who deal with the national forests.

Senator SMOOT. And it is constantly increasing.

Senator CLARK. And it seemed as though the administration expenses have from year to year been constantly increasing and keeping ahead of the resources that are derived from the sale of the product of the forests, and yet while there has been no profit to the Forest Service from that increase, it has become very burdensome on the consumer.

I notice another thing in here, or fail to notice it if it is here. I have not read it so very carefully. This section provides that all the proceeds shall be distributed, one-half to the reclamation fund, is it?

Mr. FINNEY. First, all of the proceeds go to the reclamation fund, then, upon its return by the water users, one-half goes to the State.

Senator CLARK. Now, you have not provided anything in here for the expense of administration under this bill?

Mr. FINNEY. I think, perhaps, that is true; perhaps it should have read the net returns; if it is the desire of Congress to pay the expenses out of the proceeds.

Senator CLARK. That leads right into one difficulty in the situation, as I look at it. I have no doubt but what that will be inserted at some time; that the expenses of administration of this law shall be borne by the proceeds. Now, if that is true, I personally have no idea that the proceeds, if they are fixed at a reasonable rate, will return anything over and above the necessary expenses of administration, and it has rather seemed to me that this return of 50 per cent to the State is somewhat of a burlesque.

Mr. FINNEY. It was not intended to be so, Senator.

Senator CLARK. I have no doubt you are correct as to that.

Mr. FINNEY. The expenses of administration will be paid just th same as the expenses of any other department are paid. That is th theory upon which it was drawn. Whether all of the revenue, wha ever it may be, will go into the reclamation fund, or whether on half shall go to the States is a matter for Congress to determine. do not believe the expenses of administration are going to be so grea Of course I look at it, perhaps, from the department's standpoin I do not believe that the expenses of doing the work in our executiv department's are so awfully high. I think that a land litigant, fo instance, can have his case tried cheaper, and get justice more easil in the Land Department than he could in the courts. You ar familiar with the practice in the courts, and know what it costs t make up a record in the courts, while here in the Interior Departmen the homesteader can write a letter here and effect his appeal fron the register and receiver, and need not even hire a lawyer.

Senator SMOOT. Mr. Finney, this section gives the Secretary of th Interior unrestricted power, does it not, to fix a Federal tax upon th greatest natural resource in the country?

Mr. FINNEY. It leaves to his dicretion the charges which are to be fixed and collected.

Senator SMOOT. He has absolute unrestricted power. Is it not true that the Supreme Court has not passed upon the question as to whether the Federal Government has the power to impose a tax upon the water rights of the State?

Mr. FINNEY. I do not think that is involved. They have not passed on that question, but I do not think that is involved here. That is not a tax on the water right of the State; it is a charge fixed in connection with the use of public lands which are available for water-power development.

Senator SMOOT. No matter whether the person pays directly or indirectly, the effect is just the same. The effect of this is to give the Secretary of the Interior unrestricted power to fix a tax upon the water used in a State.

Mr. FINNEY. No; I can not admit that, Senator. The water developer must appropriate his water under State law, and the States can charge him for that water right, or they can give it to him free, as they do now. The Federal Government owns the land, and the land is so situated as to be valuable for power development, and it has an immense value in certain cases.

Senator STERLING. The rental or charge is for all power developed.

Mr. FINNEY. That is not figured on water really, and it is not figured on land.

Senator SMOOT. You do not develop power by land; you develop power by water. Why would it not be better, if we are going to assume that the Federal Government has the right to charge for the water that develops power upon Government land, to put a schedule right into the bill and say what the charges shall be for the power developed, rather than to leave it in the power of the Secretary of the Interior to make any price that he may see fit?

Mr. FINNEY. Well, that suggestion was made before the House committee. Of course there is this difficulty about fixing arbitrary rates: It might, in some cases, work a hardship.

Senator NORRIS. In some cases it would prohibit development.

Mr. FINNEY. In some cases it would prohibit development.

Senator CLARK. Let me ask you this question: Is it the theory of the department in the construction of this bill that the Government shall have a wide range of prices? Now, the basic proposition is that land upon which this power plant shall be placed—and there is but little difference in the value of the land, wherever that may be—is not of any great value anywhere for general purposes.

Mr. FINNEY. For agricultural purposes; you are right, sir.

Senator CLARK. For any general purposes.

Mr. FINNEY. Yes, sir.

Senator CLARK. These lands become valuable in the theory of the department because of the fact that it is possible on these lands to develop water power.

Mr. FINNEY. That is true.

Senator CLARK. One piece of that land, intrinsically, no matter where it is situated, is of little different value than another piece located elsewhere. Now, is it the theory of the department to make a sliding scale of charges for horsepower developed, dependent upon the value of the land for water-power development or dependent upon the value of the land at some particular place for water-power development? Now do you get my question?

Mr. FINNEY. Yes. It is not the purpose to discriminate as against localities, and two sites of equal value and of equal productivity should, in my opinion, have like rates.

Senator CLARK. What, then, would stand in the way of fixing a definite rate per horsepower? Of course it does not cost the Government any more to have horsepower development in one place than to have horsepower developed at another. The cost of development depends entirely upon the party developing the power and not upon the Government at all. The cost of development falls entirely upon the party developing the power and not at all upon the Government. Now, that being the case, why should there be a wide difference in one place from another, except it be that the Government is to share in the value of the power developed? In other words, the Government being in possession of the site, says that the State or the party developing the land shall pay to the Government a share of the profits which are derived from that business instead of paying them for the use of the land.

Mr. FINNEY. That is not my understanding of the theory of the bill. There is a difference, Senator, of course, between power sites. For instance, we may have one where, by the construction of a high dam, and because of the vast volume of water in the river, an immense amount of horsepower can be produced, and the party who gets a permit there develops that site to the maximum capacity and produces an immense amount of power. I should say the charge there should perhaps be lower than in a case where only partial development is had.

Senator CLARK. Then the price which the Government fixes upon this horsepower is not dependent upon the intrinsic value of the lands, but is dependent upon the value of the horsepower that can be developed.

Mr. FINNEY. That is really part of the land value, Senator, as I understand it. For instance, land down in the Mississippi Valley which is practically level, may have water flowing through it; but that has no value for power. Land on the mountain side, where you get the fall and have the water too, has a positive market value for power purposes itself, if it were put up for sale at auction.

Senator ROBINSON. Is it not true that, generally speaking, the value of land is in every case determined by its location and its adaptability to a particular business? A piece of land situated in the suburbs of a city, suitable for a manufacturing plant, has a value that is governed by that consideration, and it is not determined by a consideration that it is of equal value otherwise of land which has not a suitable location for that purpose.

Mr. FINNEY. That is it exactly.

Senator ROBINSON. So that the fact that the land is suitable as a site for water-power purposes gives a value to the land just as well as the fact that it might be suitable for some other purpose might give value to it.

Senator CLARK. Of course, if the theory of this bill is to upset every decision of the Supreme Court as to the title the United States has in the lands of the United States, that may be correct.

Senator ROBINSON. That is not involved in the question.

Senator CLARK. That is involved in the question.

Senator ROBINSON. Whether you regard that the Government has that right or not, the value of the land is fixed by its usefulness for a specific purpose.

Senator SMOOT. The Senator must know that every homesteader or every other entryman of public land is not entering the same class of land, but he does not have to do one thing more for a good piece than he does for a poor piece.

Senator ROBINSON. Let me make one suggestion.

Senator SMOOT. That has never been brought into the question of public lands.

Senator ROBINSON. I suggest that Mr. Finney be permitted to go on with his statement.

Senator CLARK. At Mr. Finney's request, he is reading this bill now section by section.

Senator ROBINSON. He has had about three days now, and there are about 10 other gentlemen here who wish to be heard.

Senator CLARK. There is no member of this committee can stop me from asking Mr. Finney questions while he is on the stand.

Senator ROBINSON. I am simply making a suggestion.

Senator CLARK. It is a suggestion that I do not take kindly, because I am asking these question of Mr. Finney in good faith.

The CHAIRMAN. The plan of examination was for Mr. Finney to make his statement uninterruptedly, and that, in a large measure, was complied with and he finished his statement; and then he said, as he went over the bill section by section, he would welcome inquiries, and there is nothing to do but to let him proceed.

Senator ROBINSON. I do not object to his doing it if he wants to, I reserve the right to make a suggestion occasionally. I have here two days and listened to the interrogation from two gentlemen. Mr. Finney made the statement that it would require about minutes to make his statement concerning the provisions of this and he has had three days, and these gentlemen are waiting me. No one can prevent me from making a suggestion. I am a member of this committee and I think I have a right to make a suggestion occasionally. I do not care what course you pursue.

Senator CLARK. The course I want to pursue is simply to ascertain the facts. This is a departmental bill, nothing more and nothing less, and Mr. Finney comes here with an honest intention to explain this bill, and the questions I am asking here are addressed to the bill.

Senator ROBINSON. I think you have been arguing it with him; but of course, that is your own business.

Senator CLARK. I have asked him what the view of the department was in connection with this section. If I ask any objectionable questions or anything that could not be asked properly, I want to be interrupted.

The CHAIRMAN. If you will allow the Chair a word, I think I can expedite matters. I am compelled to say that I think while Senator Robinson was out Mr. Finney finished his statement and started in to examine the bill section by section, and said he was then ready to answer questions.

Senator ROBINSON. No; I was here when he finished his statement, yesterday or day before yesterday.

The CHAIRMAN. That was the understanding. I will say that the matter of asking questions is, of course, largely in the judgment and discretion of the members.

Senator ROBINSON. Mr. Chairman, you did not understand me to suggest anything else, I hope.

The CHAIRMAN. Oh, no.

Senator ROBINSON. I simply made the suggestion that there ought to be a reasonable limit to this inquiry.

The CHAIRMAN. I am in accord with you. I think I will have to trust that largely with the individual members of the committee as to how far we shall go in that direction. I had hoped to get through with Mr. Finney by 12 o'clock. That is my present wish.

Go ahead, Mr. Finney, and the members may ask what questions are reasonable.

Mr. FINNEY. It is true that in disposing of lands under the homestead act there has been no rate fixed that takes into account the value of the tract of land. But that has not been so in the other resources. Coal, for instance, is disposed of on a tonnage basis, with no regard to the quality. They fix a minimum but not a maximum.

Senator NORRIS. I want to ask you if there is not this difference: There is no danger of the creation of a monopoly when a man takes up a homestead, but one of the objects of this legislation is to prevent monopoly in control of the natural resources.

Mr. FINNEY. Yes.

Senator NORRIS. If we valued them simply as homesteads, we will give to some people the most valuable sites, worth millions, and probably more in some instances, and enable a monopoly to be created.

Mr. FINNEY. That is our idea, like some of them have acquired already.

Senator NORRIS. Yes; I think so.

Mr. FINNEY. The moment they pass a fee simple title they are not valued at $1.25 an acre, but they are valued at their real value for power development. I cited one instance where they have valued the site at $26,000,000.

Senator NORRIS. If in a case in some particular locality where the power developed is going to come into competition with power for like purposes developed, we will say, by coal, and the department knows, or can know with reasonable certainty, what it costs to develop that power by coal, if the development by water power would be way below that and only a nominal charge was made for such development, and they came in competition with the coal-developed power, they will, of course, put the price as near that that was already for sale by coal development, so that they could get the business; they would cut under it probably only a nominal amount. In such a case could the Government not well afford to charge a higher rate for power than in the case where such competition did not exist, because the consumer would get no benefit of it, and if the Government did not get something out of it it would simply go to the monopoly?

Mr. FINNEY. Meaning an unnecessarily large profit to a monopoly.

Senator NORRIS. Yes, sir.

Mr. FINNEY. And your thought is that the public might as well have a part of that, rather than have it go to the monopoly?

Senator NORRIS. Exactly.

Mr. FINNEY. That is true.

Senator NORRIS. If the Government did not get it it would not go to the benefit of the consumer.

Senator WORKS. Mr. Finney, we have heard a good deal here about monopoly in power plants. Do you think it would be advisable to duplicate plants on the same stream of water for the development of power where the rates are regulated by the State?

Mr. FINNEY. Well, the power people claim that the power is essentially a monopoly and can be more economically developed by a monopoly.

Senator WORKS. I am not talking about that.

Mr. FINNEY. I am not willing to concede that. I think that competition ordinarily operates to the benefit of the public, and you should have competition.

Senator WORKS. Suppose the rates to the consumers are fixed by the State authorities: How can there be any injurious monopoly in that case?

Mr. FINNEY. The State fixes the maximum.

Senator WORKS. How can it be to the advantage of consumers to have half a dozen plants on a stream where one could supply all they need?

Mr. FINNEY. It is my understanding that State commissions fix a maximum charge that can be made for service. If you have two or more they will, by competition, cut below that maximum.

Senator WORKS. I think you will find that is not true of our State. They have power to fix the charge which shall be made by any corporation under their control.

Mr. FINNEY. They have power to fix a maximum and minimum.

Senator WORKS. They have power to fix the rates that may be charged.

Mr. FINNEY. Do they just arbitrarily say they shall charge so much for service?

Senator WORKS. I do not know what they do, but I know that the railroad commission of California, which fixes the rates, and which is generally regarded as the best commission in the country, and is trying to fix rates that will be just as between the corporations and the consumers, does have power to fix the rates. I do not know what more you can possibly do for the consumers than to allow that to be done. The idea of duplicating those plants on one stream of water, it seems to me, would be absurd.

I want you to go back for a moment to section 5. It is provided there for the taking over of the system by the Government, among other things, the water right that it pays for. Do I understand that under that provision the Government will become the owner of the water right in the stream, the same as a private individual?

Mr. FINNEY. No; I do not so understand it.

Senator WORKS. How could it operate the plant otherwise, and how could its operation of the plant be subject to regulation by the State? Do you understand that the Government, if it took over these water rights, would be subject to the rate-fixing power of the State?

Mr. FINNEY. If the Federal Government took it over and operated it?

Senator WORKS. Yes.

Mr. FINNEY. I do not believe it would be; no.

Senator WORKS. Then you would free that entirely from any regulation by the State?

Mr. FINNEY. I do not think, assuming that the Federal Government is going to operate the plants in the State of California, or the State of Kansas, that the State should regulate it.

Senator WORKS. This section provides for just that, does it not?

Mr. FINNEY. This section authorizes the Government to take over the plant. The idea is not that the Government is going to operate these power plants.

Senator WORKS. Do you suppose, if the Government takes it over, it will suspend the operation of it?

Mr. FINNEY. Not at all; but the theory is that Congress may, 50 years from to-day, adopt a different method of handling them.

Senator WORKS. We can only deal with the situation that is before us now.

Mr. FINNEY. Exactly, and you reserve the right of recapture, as some one has called it, in order that future Congresses may deal with it.

Senator WORKS. You may, after 3 years' notice, take over this plant long before the 50 years has expired.

Mr. FINNEY. No; but 3 years' notice before the 50 years expires.

Senator WORKS. Yes; I stand corrected with regard to that matter, and it is not necessary to take up time with it.

Under the law of California we have a commission that is endeavoring to determine the quantity of water that is to be used by different consumers, in order to prevent the use of water by somebody

at the expense of some one else. Do you think the Government would be subject to the action of that commission in case it took over the plant and the water rights?

Mr. FINNEY. I think, Senator, that the water rights of one of these plants would be acquired, in the first instance, by appropriation under the State laws. I think if, at the end of the 50-year period, the plant was taken over and leased by a third party, he would have to appropriate that same water.

Senator WORKS. You do not quite answer my question.

Mr. FINNEY. If the Government took it over I presume that it would follow the same course. In dealing with the reclamation work, in which the Government is engaged in construction, notices of appropriation are filed in accordance with State laws. I can not conceive, Senator, that there would be any trouble between the Government and its own States, in a matter of that kind.

Senator WORKS. Suppose some water user could divert the water above the point where the power company is taking out the water and the question of the right to do so should arise between the individual and the Government, he could not go into court and determine that question, could he, as a gainst the Government?

Mr. FINNEY. I think if the Government went into business he could, under the decisions of the courts.

Senator WORKS. Do you think he could sue the Government to determine his water rights?

The CHAIRMAN. He might get the Government to sue him in order to determine the question, Senator.

Mr. FINNEY. I think he could. There are several decisions of the courts which say that if the Government undertakes to enter into business—that is not the exact language—it assumes, in a sense, at least, the duties and obligations of a private individual or corporation.

Senator WORKS. Then I infer from that that you are ready to say that he could sue the Government.

Mr. FINNEY. I am inclined to say that some way could be found in which he could.

Senator WORKS. That is not the question. We have got to deal with this question as the law exists to-day. We can not speculate as to what the law may be 50 years from now.

Mr. FINNEY. I do not quite catch your point. These water rights would be acquired by appropriation. If a water right was acquired by appropriation, the water right would be transferred to that party, and there would not be any interruption. I do not see why a third party, farther up the stream, would acquire any right.

Senator WORKS. That may be true, but there may be a question between a person who undertakes to divert water and the Government.

Mr. FINNEY. However, if there is any doubt, Congress could very easily provide the necessary means of meeting it by statute.

Senator WORKS. That might be true, but maybe Congress is not ready to do that. We have got to deal with this bill as we have it.

Senator SMOOT. If the Government should take over the plant, would the Government pay taxes to the State on the plant?

Mr. FINNEY. I do not know whether it would or not, but I presume not. It might, however. Congress would have the power, of course, to make an allowance to the State. However, I do not un

derstand that this fixes or requires that the Government shall at the end of 50 years take over these plants and operate them as a going concern.

Senator WORKS. It would either have to do that or the operation would at least be suspended, if not entirely abandoned.

Mr. FINNEY. No, Senator; you could renew the lease.

Senator WORKS. If you find somebody else that wanted to lease it, I can, of course.

Mr. FINNEY. Probably the original corporation would be desirous of renewing for another period. There may be other third parties who desire it. But it leaves the Government free, if some municipality wants to acquire the plant for its own use, where they have public utility districts. Where they have such districts and they want to acquire the plant it leaves it free for Congress to take over that plant.

Senator WORKS. What do you mean by "utility districts" in California?

Mr. FINNEY. I have reference to the law passed by the California Legislature in 1913 which authorizes the organization of districts.

Senator WORKS. Do you know of any having been organized under that law?

Mr. FINNEY. I understand the law was passed in 1913.

Senator NORRIS. Have there not been some districts established?

Senator WORKS. You are referring to irrigation districts. That is altogether a different thing.

Senator NORRIS. I was thinking of the Hetch Hetchy bill.

Senator WORKS. No. There has been an effort made, but so far it has failed to secure the necessary vote. I have not examined that law. As I recall it, they are called municipal water districts. Judge Short, how is that?

Mr. SHORT. I was not paying particular attention, Senator. What is your question?

Senator WORKS. The water districts that are provided for in the act of 1913 are municipal water districts, are they not, where different cities may join together?

Mr. SHORT. Yes, sir; I so understand it.

Senator WORKS. They are not for the purpose of irrigation, as I understand it, but for the purpose of supplying water for domestic uses.

Mr. FINNEY. No; I have reference to the public utilities districts authorized by the act of the legislature of 1913.

Senator WORKS. That is the municipal district I am talking about; but Mr. Finney seems to have in mind some other district. I understood that act was not passed. Of course I do not know, Mr. Finney.

Mr. FINNEY. I just looked it up a few days ago. I just mentioned it as an organization which might be formed to take over one of these plants.

Senator WORKS. I was not intending to controvert your statement. I have not looked into it.

Senator NORRIS. On that section, the one you have been talking about about the turning of this money, if there should be any, into the reclamation fund, and after its return, after it has been used there, as I understand it, half of it goes to the State?

Mr. FINNEY. Yes, sir.

Senator NORRIS. I would like to ask you in regard to your judgment as to that, and of the department, as to the advisability of that What is the object of that provision? Why should it be turned back or why should it be put into the reclamation fund?

Senator WORKS. That is to secure the passage of the bill. [Laughter.]

Mr. FINNEY. Answering Senator Norris's question, the proceeds of the public lands are now going into the reclamation fund. The lands which are withdrawn for these power sites are, of course, now withdrawn from sale, and therefore their selling value will not come into the reclamation fund. So the Secretary thought there should be some restitution for that in the nature of turning over these rentals, as otherwise they would have received the cash value of the land.

Senator NORRIS. The idea struck me that instead of the provision in this bill—I do not know that I have any definite, settled conviction on it, but I would like to get your idea—that it would be advisable, instead of turning it in as provided in the bill, to keep it in a fund in the Treasury, a separate fund, for the purpose of taking over these water-power plants or for the purpose of developing others.

Mr. FINNEY. Our idea was that it would be better to use the money for developing the other resources of the arid lands of the West, because it was our idea that that would be a more direct benefit to the people of the West, where these sites are situated.

Senator NORRIS. I do not think there will be much in this fund.

Senator SMOOT. We won't have to quarrel over it.

Mr. FINNEY. Another thing that was taken into consideration was the fact that of course if the land was in private ownership they would tax the land themselves. That is an other question. A portion of the profits of the forest reservations, it is provided by law, shall be turned over to the States.

Senator CLARK. Is there not another idea, namely, that under the State law the States shall be given a certain percentage of the public lands that are disposed of?

Mr. FINNEY. Five per cent; yes.

Senator NORRIS. If that is the idea, then why not turn it over in the first instance?

Senator CLARK. I think they should.

Senator NORRIS. Instead of putting it into the reclamation fund and then turning half of it over to the State.

Mr. FINNEY. There is just this situation to be considered: The Government is building some thirty-odd reclamation projects, and the receipts are diminishing, and the result would be that they would not have funds sufficient to complete these projects.

Senator NORRIS. I am a great friend of reclamation, and I believe that we ought to extend it. At the same time it does not seem to me to be quite fair, if the theory is right, that in lieu of taxation something should be turned back to the States, it should be first turned into this reclamation fund. If the theory is right, it is as applicable the first 30 years as the next 30 years.

Mr. FINNEY. Our theory is that while it is being used in the reclamation fund the same States are getting a direct benefit from the use of the money.

Senator NORRIS. If that is true then let it stay in the reclamation fund. I do not see why you put it in. You say you put it in to help the reclamation fund, then you take it out because the States are entitled to it. It seems to me that one or the other of those positions must be illogical. If it is right that the States should get it in lieu of taxation, then why not let the State have it at the beginning?

Mr. FINNEY. After the work of reclamation is completed it is assumed that there would be a vast amount in the treasury which would be unappropriated.

Senator NORRIS. That would be true anyway; Congress would have to legislate with regard to that fund.

Mr. FINNEY. This does not wait for that fund. It says that it may be used once, and it would be perhaps 20 years coming back in installments, then it will be turned over to the States and they would get the benefit of it. I do not think it is apt to be such a very large fund myself.

Just while we are on that subject, this does not, of course, preclude the States, and will not preclude them, from taxing the improvements on these lands. They are doing that now. Practically all of the Western States tax improvements on public lands.

The proviso of this section 7 provides for free use by municipal corporations for municipal purposes, and also for free use of small developments, not exceeding 25 horsepower, for domestic, mining, or irrigation use.

That was suggested so that a farmer who might have a little stream up in the hills somewhere, or a small mine something of that sort might have his own plant.

Senator NORRIS. The proviso is for free use by municipal corporations for municipal purposes. You have not any limit as to the amount of power they may use, have you?

Mr. FINNEY. It is not limited whatever, provided it is for municipal purposes.

Next is section 9, which covers the situation where power is developed and transmitted in a State which has not provided a commission or other power to regulate rates, and vests the power to regulate in the Secretary or such other body as may be authorized by Congress. The bill, as originally drafted, excluded from the operation of the bill, those States which did not have such a body, but it was thought that would prevent development in those States.

Senator NORRIS. That means there should not be anything developed there, no power used there and developed elsewhere?

Mr. FINNEY. Yes, sir; on public lands. It was amended, and this section put in which gives the Secretary of the Interior, or such other body as Congress may authorize, power to regulate in those States until such regulatory bodies are provided.

Senator NORRIS. I think that is a very interesting phase of the bill, and I wanted to ask you, and probably I can ask you the questions better by taking an imaginary illustration: Suppose under this bill a project is developed in one State; the power is developed in one State, but the lines of transmission carry the energy into some other State. Now, in the State where the power is developed the use and control of the service and charges would be under the control and

jurisdiction of a State, would it not? In other words, it would be intrastate and not interstate, so that the jurisdiction would be under the State law; is that not true?

Mr. FINNEY. You are speaking now of the development and use within the limits of a single State?

Senator NORRIS. Yes.

Mr. FINNEY. That, I understand, would be under State jurisdiction.

Senator NORRIS. The same power, however, the same development, is transferred or transmitted into some other State. In that other State it is turned over to the public-service commission, if they have one, so that if they had none in that case the Federal Government would acquire control of the rates and service.

Mr. FINNEY. No; I do not understand that is the effect of this bill. I understand that there the Federal Government would control.

Senator NORRIS. Yes; I so understood you. I would like to get your idea on that.

Mr. FINNEY. Section 3 provides:

> That in case of the development, generation, transmission, and use of power or energy under such a lease in a Territory or in two or more States the regulation and control of service and of charges for service to consumers and of the issuance of stock and bonds by the lessee is conferred upon the Secretary of the Interior or committed to such body as may be provided by Federal statute.

There it is an interstate use.

Senator NORRIS. Yes; I understand that, but is there not a provision in the bill that provides that if the State has provided by its law for a public utilities commission, giving them jurisdiction, that they shall have the power to regulate and control service and charges for service?

Mr. FINNEY. That only relates to intrastate development and use, Senator, as I understand it.

Senator NORRIS. Then I have a misconception of what is in the bill here if that is the case. There was a controversy, I think, between friends of this kind of legislation, as to whether in a case such as the illustrative one that I put to you, where it carried across the line and became interstate, we ought to confer jurisdiction upon the State authorities in the State where it had been transferred to to control the service and charge or whether we ought to retain that in the Federal Government.

Mr. FINNEY. This bill retains it in the Federal Government, as I understand it.

Senator NORRIS. I do not understand it that way. Only retains it in the Federal Government when they would have no machinery in the State, as I understand it.

Mr. FINNEY. No. This section 9, which we are discussing now, relates to development, transmission, etc., of power in a State. It only relates to a development and use in the limits of the State. There it is a matter within the jurisdiction of the State commission. Section 3 relates to the interstate proposition and provides for Federal control.

Senator NORRIS. Then if this bill were enacted as it is, according to your idea of it, when energy was conveyed across the State line to a different State from that in which it was developed, regardless

of whether that State had a commission or not, the Federal Government would control the rates as to service and charges?

Mr. FINNEY. Yes, sir. That is what the bill provides, as I understand it. That is the intent, at least. I think that is the way it should be.

Senator NORRIS. I agree with you. I was rather dissatisfied because I thought you had the other idea.

Senator CLARK. My notion, Mr. Finney, of the bill is that it only provides a charge for the portion of the energy which is carried across the State line. In other words, the same question which arose here yesterday.

Mr. FINNEY. Yes, sir. I understand it would give Federal control to that part of the power which is not used in the State where it is developed. It gives control to the part that really is interstate.

Senator WORKS. Well, the bill is not at all definite in that respect, I am afraid.

Senator NORRIS. It rather seems to me there is a chance for misunderstanding.

Mr. FINNEY. Possibly it might be made a little clearer.

Senator WORKS. I think it should be.

Mr. FINNEY. Section 10 simply deals with the entry or disposition of the lands which are now withdrawn, or which may be withdrawn, for sites. I think I mentioned yesterday that there are many places where the land is merely desired for a pressure pipe line or canal, or where only two or three acres in one corner would be flooded by a reservoir, and the rest might as well be disposed of for homesteads or other uses for which it is useful, and the thought here was to give the Secretary discretion to dispose of those lands, subject to a reservation in the patent of the right of the United States or its grantees to occupy and use any part of the land for power generation, development, and transmission.

Then the proviso deals with the class of filings which were made before withdrawal and which are now suspended. I tried to show, in the memorandum which I put into the record yesterday, that the department holds it is required now to withhold those lands, under the act of June 25, 1910. Many of them are perfectly willing to take the patent with this reservation in it, and that would permit us to pass those claims to patent, subject to that kind of a reservation.

Senator CLARK. Mr. Finney, your idea is that you could do that under the present authority given by act of Congress—that you could pass a limited patent without specific authority of Congress?

Mr. FINNEY. No, sir; I do not think we have any right to do that.

Senator CLARK. Then is it your idea that you have authority to grant those limited patents, as the law now exists?

Mr. FINNEY. No, sir. I think we have not the authority at present, therefore we tried to put it in here.

Senator CLARK. Oh, I must have misunderstood you. The patents you are speaking of now that you will grant, you say these people are willing to take with the reservation?

Mr. FINNY. Yes, sir; but we have not authority to issue a patent with the reservation in it at the present time.

Senator CLARK. So that all these patents are held up at this time, are they?

Mr. FINNEY. They are held up; yes, sir.

Senator CLARK. Well, is there not a provision here somewhere that where a man avails himself of the present land laws and has made a proper compliance with the law prior to its withdrawal, that there shall issue patent?

Mr. FINNEY. No, sir.

Senator CLARK. In the withdrawal acts have we not specifically put that in?

Mr. FINNEY. No, sir. I was just referring to the act of June 25, 1910, in which these various withdrawals were made. In that act Congress specially excepted from the operation of the law homesteads and desert-land entries, and those are going right through to patents, but scrip and selections and timber and stone applications are the ones I have reference to.

Senator CLARK. Those are the ones to which I referred, but I misunderstood your former statement.

Mr. FINNEY. No; I most emphatically say that we have no authority to put a reservation or condition in the patent which is not authorized by law; and we have been suspending those selections and timber and stone applications, and telling applicants that a bill was pending, and if they desired we would just keep their entries suspended until we find out whether there will be legislation.

Section 11 relates to the examination of the books and accounts of lessees, and authorizes the Secretary to require them to submit statements and reports with respect to their operations.

Section 12 provides for the forfeiture of leases, and it is guarded, I think, so that it seems to be unobjectionable:

That any such lease may be forfeited and canceled, by appropriate proceedings, in a court of competent jurisdiction whenever the lessee, after reasonable notice, in writing, as prescribed in the lease, shall fail to comply with the terms of this act or with such conditions not inconsistent herewith as may be specifically recited in the lease.

Senator CLARK. Might I make a suggestion in regard to section 11?

Mr. FINNEY. I will be very glad to hear it, Senator.

Senator CLARK. Would it not sidestep some questions that might be raised if that section 11 were made to read that the Secretary of the Interior is hereby authorized to insert as a part of said lease the right to examine books and accounts of lessees?

Mr. FINNEY. I think that would be a very good amendment.

Senator CLARK. It occurs to me it might, because with an interstate corporation of course under the Trades Commission bill I suppose we could do that now, but under this particular bill it seems to me that it should be made a part of the lease rather than a part of the law.

Mr. FINNEY. I think that is a very good suggestion.

Section 12, that I was speaking of, you know, would only authorize forfeiture in event the law was violated or in event of a breach of the conditions expressed in the lease.

Senator ROBINSON. And that forfeiture must be by proceeding in court.

Mr. FINNEY. Must be by proceeding in court, getting away from any arbitary revocation by an executive officer.

Section 13 simply authorizes the making of rules and regulations under the act.

Section 14 is the section inserted to disclaim any intention to interfere with the laws of any State relating to the control of water.

Section 15 is a repeal section. It repeals acts, or parts of acts, in conflict herewith, and the first proviso is to the effect that the provisions of the act of February 15, 1901—that is, the present revocable permit law—shall continue in force as to the lands in the Yosemite, Sequoia, and General Grant National Parks in the State of California.

You will notice that this bill does not include national forests. It was suggested that possibly it might be contended that we were repealing the act of 1901, which is specifically applicable to these parks.

Senator WORKS. There are other parks, are there not? Why do you single those out?

Mr. FINNEY. Those were named in the act of February 15, 1901, as the parks in which the Secretary might grant revocable permits.

Senator WORKS. That was done, I understand, to prevent the repeal of the Hetch Hetchy bill.

Mr. FINNEY. There are companies out there, for instance, the Mount Whitney Co., which have made very valuable developments.

Senator CLARK. You made a statement just now that this bill does not affect lands included in a national forest.

Mr. FINNEY. Line 13, page 1, it says "not including national forests."

Senator CLARK. It says "not including national parks." It does include national forests.

Mr. FINNEY. I meant to say parks.

Then the concluding proviso of section 15 is to the effect that this act shall not be construed as revoking or affecting any permits heretofore given, but gives the permittee an option, if he desires, to surrender his permit and take out a lease or contract or whatever you choose to call it, under this act.

The last section, section 16, was put in as the result of a conference between the committee having charge of the Adamson bill relating to navigable waters under the jurisdiction of the Secretary of War and those dealing with this bill. It was designed, together with a paragraph in the Adamson bill, to define the respective jurisdictions of the War and Interior Departments.

Senator NORRIS. Does that mean that this bill shall not apply to navigable streams?

Mr. FINNEY. No, sir. It is limited, as you will notice:

That this act shall not apply to navigation dams or structures under the jurisdiction of the Secretary of War or the Chief of Engineers or to lands purchased or acquired by condemnation by the United States or withdrawn by the President under the act approved June 25, 1910, where such lands are are purchased, acquired by condemnation, or withdrawn by the President for the sole purpose of promoting navigation.

As you know, there is a good deal of work going on in various rivers, for instance in the Black Warrior, in Alabama, where the Government builds dams for the purpose of improving navigation. Those dams have created an opportunity for power development, and in connection with them certain public lands have been reserved for the use of the War Department. We have had one or two applications from private parties to develop water in those dams. The

Secretary of War has held that that might interfere with his use of the structure and that we have no power to grant a permit to develop that power. The promoters of the Adamson bill thought we might interfere with them, and by agreement sections were put into the two bills trying to define the jurisdictions.

I take it if there is a navigable stream on public lands and there is an opportunity for power development, and there is no river and harbor improvement connected with it, the Secretary of the Interior would have power to deal with it. Now, if the War Department was contemplating some construction of river and harbor improvement they would have jurisdiction under the terms of the Adamson bill.

Senator CLARK. Of course you do not have to consider this in your department, but it seems to me that we might avoid conflict by segregating the two classes, the one on navigable streams and the one on nonnavigable streams, even though the Government might have the land.

Mr. FINNEY. Some of the War Department officials contend that the navigable waters mean every stream that flows into a navigable stream. For instance, waters at the Tennessee Pass, which goes down into Colorado. Of course we could not concede that view.

Senator NORRIS. That is an unsettled question.

Mr. FINNEY. We did make an attempt to define what should constitute navigable waters, but we could not agree.

Senator NORRIS. It is contended by these people that navigable waters are any waters entering into a navigable stream. If their contention is held to be good it would include practically every stream in the United States.

Mr. FINNEY. Practically every stream.

Senator NORRIS. No matter how small.

Mr. FINNEY. Every brook that ultimately found its way into a navigable stream would be included in the term navigable waters.

Senator NORRIS. I want to ask you on that point, is it not desirable that there should be a definition of a navigable stream that should be enacted into law to settle that very conflict?

Mr. FINNEY. I am not at all an expert on the matter of navigability. As I understand it, the policy of the Government is frequently to make streams which nature has made nonnavigable navigable in fact.

Senator CHAMBERLAIN. There are conflicting decisions by the courts of the States on the subject as to what constitutes navigability.

Mr. FINNEY. When we had this matter under consideration I looked up the decisions, and there seems to me a wide conflict.

Senator NORRIS. There is not a stream in the United States but what is possible to make navigable.

Mr. FINNEY. We thought it would be desirable to define it, but we were unable to agree upon a definition, Senator.

Senator NORRIS. That does not do away with the duty of Congress, it seems to me. Whether you agreed or not, it would be better to have it decided in some way than not to have it decided.

Senator CHAMBERLAIN. I suppose you would like to have us do what you have been unable to do.

Mr. FINNEY. There certainly would be no difficulty- -

Senator NORRIS (interposing). I wanted to get back to that question of control. I think it is one of the important things in the bill.

Senator ROBINSON. Will you pardon one interruption there? The public-utilities act, to which Mr. Finney referred a while ago while you were discussing that, I believe, was passed by the California Legislature and approved June 5, 1913, and was effective August 10, 1913. It is quite an elaborate act, giving authority for the organization of public-utility districts composed either of incorporated municipalities alone or both incorporated and unincorporated, and gives powers to issue bonds and levy taxes and the usual powers conferred on such districts.

Senator CLARK. Does that give any authority for irrigation purposes, do you know, Senator?

Senator ROBINSON. I have not read all the act, Senator, but I think not.

Senator CLARK. I think it is intended to cover power and light.

Mr. FINNEY. I think so. They already have irrigation districts.

Senator ROBINSON. I can tell you in just a minute, if it is deemed material.

Senator NORRIS. While you are looking it up, Senator, I will go on with my questions.

Between section 9 and section 13 it seems to me there might possibly be a conflict, and it does seem to me that you are wrong in your construction of section 9 when you say that in case power was transmitted over a State line the Secretary of the Interior would have control as to the regulating of rates and service.

Section 9 says that in case of the development, generation, or transmission or use of power or energy under a lease given under this act in a State which has not provided a commission or other authority having power to regulate rates and service of electrical energy and the issuance of stock and bonds by public-utility corporations engaged in power development, transmission, and distribution, the control of service and charges for such service to consumers and stock and bond issues shall be vested in the Secretary of the Interior or committed to such body as may be authorized by Federal statutes until such time as the State shall provide a commission or other authority for such regulation and control.

So you see it applies not only to the development and generation, but also to transmission, and likewise "for use of power or energy."

I take it it would apply wherever the power or energy was used.

Senator STERLING. Do not the words "in a State" limit it, Senator?

Senator NORRIS. I am coming to that.

or use of power or energy under a lease given under this act in a State—

Now, there is transmission that may be in a different State from where it is generated—

In a State which has not provided a commission or other authority having power to regulate rates, etc., issuing of stock, etc., the control of service and charges for service to consumers and stock and bond issues shall be vested in the Secretary of the Interior or committed to such body as may be authorized by Federal statute until—

Here is the modification—

Until such time as the State shall provide a commission or other authority for such regulation and control.

Mr. FINNEY. You can see the whole thought of this section deals with the generation and use in a State, and I agree with you it could be made much clearer.

Senator NORRIS. It refers to the use of power in a State.

Mr. FINNEY. We should have used the word "and" instead of "or," and might have used the words "wholly within the limits of a State." How would that do?

Senator NORRIS. I should think so. In other words, that ought to be specific so as to know what we are going to do in regard to the control.

Mr. FINNEY. How would it do to insert the word "and"?

Senator NORRIS. That would not do, because that comes after the word "transmission." The transmission of the power may be in a different State than the one in which it was generated.

Mr. FINNEY. I was trying to get them altogether with the word "and"—development, generation, transmission, and use within a State.

Senator STERLING. Strike out the word "in" and make it "within a State."

Mr. FINNEY. Or "wholly within a State." I think that could be made much clearer, and it should be.

Senator STERLING. Reading, then, section 9 in connection with section 3, it would make it quite clear.

Senator NORRIS. It seems to me, reading section 9 and section 3, there is a conflict between the two.

Mr. FINNEY. I think it might be desirable to amend that section.

Senator SMOOT. Mr. Finney, turn to section 13 of the bill, which reads:

> That the Secretary of the Interior is hereby authorized to perform any and all acts and to make such rules and regulations as may be necessary and proper for the purpose of carrying the provisions of this act into full force and effect.

Why repeat those words in the section? You find them in all the other sections where any power is vested in the Secretary. I think it is in nearly the exact words, and perhaps a little stronger than the words in section 13.

Mr. FINNEY. I do not really think it is necessary, because it starts out by authorizing him to make general regulations. I think it is a repetition, really.

Senator SMOOT. It seems to me it is a repetition that there is no need of having in the bill.

Mr. FINNEY. That is a section that is quite often found in acts, and I presume was thrown in here for good measure.

Senator CLARK. Does that not allow the Secretary to do exactly what many people think he ought to be able to do; that is, to deal with each individual case? He may have his general rules and regulations applicable to all, and then would not this section allow him to make certain additional rules and regulations that would apply only to particular cases?

Mr. FINNEY. That was not our intention in putting it in there, Senator. I see no particular reason why it should not be omitted from the bill, as suggested by Senator Smoot.

Senator SMOOT. The object, of course, of the department, is to have an act or bill passed that will develop the water powers of this country, I take it.

Mr. FINNEY. That is the primary purpose.

Senator SMOOT. Mr. Finney, I take it for granted that this is what is known as a department bill, and more than likely was drafted in the department?

Mr. FINNEY. Substantially, the bill was drafted in the department; but there were some improvements in the House.

Senator SMOOT. Well, I was going to ask you, is there any one in the department that has ever tried to raise the money to develop water power in this country?

Mr. FINNEY. We have some men in the department who have been connected with power corporations. I know of one who was connected with J. G. White & Co.

Senator SMOOT. Did he take an interest in drawing the bill?

Mr. FINNEY. He has helped generally; yes.

Senator SMOOT. I have read the testimony in the House. Is there anyone who testified there that has ever undertaken to raise money to develop water power?

Mr. FINNEY. I really can not answer that question, Senator.

Senator SMOOT. Has anyone testified that has ever built a water-power plant?

Mr. FINNEY. Undoubtedly some testified who helped to supervise the building of plants.

Senator CHAMBERLAIN. Was there anyone to keep them from testifying if they wanted to?

Senator SMOOT. That is not the idea.

Mr. FINNEY. I did not so understand the question. I understood your question was confined to representatives of the department. There was full opportunity to the power companies, and a number of them did appear and give the House the benefit of their suggestions.

Senator SMOOT. What I wanted to get at is, if the men that were responsible for the drafting of the bill had ever undertaken to build a plant or undertaken to raise money to have one developed, or both; and would it not have been a proper thing to have had ideas from those that have had that experience, in order to have had a number of provisions put into the bill to make a workable bill.

Mr. FINNEY. That is exactly what Secretary Lane did. He conferred with a large number of engineers and a number of capitalists who make investments in water-power enterprises and endeavored to get their ideas. It is true that all of their suggestions have not been incorporated in this bill. It is perfectly natural for the people who are interested in the development of water power to want all they can get, and, on the other hand, I think it is perfectly proper for the Secretary of the Interior to endeavor, as he sees it, to safeguard the public interests by not conceding what he deems is unreasonable and not in their interests.

Senator SMOOT. I am not finding fault with that. All I wanted to know was to what extent the department has reached out for that information so as to make the bill workable, because if the bill is drawn in such a shape that the men interested in the development of water power, or capital, as some say, will not undertake to develop the water powers under it, then we will be in a worse position than we are to-day as far as the development of the power is concerned.

Mr. FINNEY. I think you are right about that, but I think we have drafted a bill that would be workable. Of course, I am not an engineer; I am not an expert and do not pretend to testify as such, but I do know there has been consultation with very many engineers and very many people who are interested in water-power development, and that there was an endeavor to obtain their views.

Senator SMOOT. That is what I wanted to draw out, because when I was reading the testimony given before the House committee it seemed to me that the men who testified for the department were all men that had not had any experience whatever, not only in the raising of money, but had no experience which would enable them to find out how difficult it was or had had no experience in the management or direction of a plant, and I felt like the department ought to have had some of the engineers that they had been consulting to explain the workable part of the bill, if it were possible, because it seems to me, from the answers that were given by the men who are here to testify, the objections to the bill are that it is not a workable measure, and I wondered why the department did not have some of the men—engineers—men who had built plants, that were in favor of the bill, to testify. That is what I wanted to bring out, and I will ask you if there is any reason why they did not.

Mr. FINNEY. None whatever. A number of engineers who were consulted by the Secretary were also before the committee of the House, but they did not appear there as representatives of the department. They appeared as representing the Institute of Electrical Engineers, and I presume gave their absolute unbiased opinion, without regard to the opinion of our department.

Senator CHAMBERLAIN. Senator Smoot's question seems to assume that the department did not have the advice of any of those practical men. I understood you to say that practical men were consulted by the department.

Mr. FINNEY. Yes, sir. We had their advice, but we did not adopt all of their suggestions.

Senator SMOOT. I do not want my question to be considered as assuming that. My question was to find out whether that was the case, and that was brought to my mind by reading the testimony and names of the witnesses, and who they were, that testified for the bill before the committee of the House.

Senator STERLING. Granting now, Mr. Finney, that in regard to the power of the Federal Government where there is transmission of power from a power plant in one State to another State, that there will be no question if there is a slight amendment made that was spoken of a while ago, I would like to ask about the provision in section 3 which gives the Secretary of the Interior power of regulation and control in the matter of issuance of stock and bonds in such a case, and as to whether or not there was any difficulty in the framing of that clause?

Mr. FINNEY. Your question relates to the company that generates in one State and transmits its power to another State, and desires to issue some bonds?

Senator STERLING. Yes, sir; to issue stock and bonds. Suppose, for example, the company is organized for the purpose of developing power wholly within the State, and it finds that a small part of that power can be transmitted to some other State; is it the idea that the

Federal Government shall have the whole power of regulating the issuance of stocks and bonds of that company in such a case?

Mr. FINNEY. I do not think it is. I do not know that that is very thoroughly covered in this bill. It is rather difficult to cover a matter of regulating the issue of stocks and bonds. It is quite easy to regulate the rate on that power which is transmitted into another State. Of course the stock and bond proposition presents a little more difficult problem. I can not suggest just now how that matter can be solved. I do not anticipate any great difficulty, however. We have no difficulty in cooperating with the States in other matters. Take the matter of irrigation, we cooperate in the State of Washington and the State of Oregon, and we have had no difficulty whatever in dealing with the State authorities, and I should think that this matter of stock and bond issue might be worked out.

Senator NORRIS. Even though you could cooperate, the Senator raises a question that will go to the validity of the bonds, even, and the cooperation of the States might not settle it. Of course there must be no doubt as to the validity of those bonds or they will not sell on the market. They must be valid beyond a doubt. It occurred to me that was a great power to confer upon the Federal Government. Suppose, for example, there is a transmission of a very small part of the power developed to another State. I personally have no objection to the control of the power in the Federal Government.

Senator STERLING. No; and I do not know that I have.

Senator NORRIS. But the bonds must be legal or it will not work.

Mr. FINNEY. We get to the very root of the matter. Control of the issue of the stocks and bonds will be very material to the consumer ultimately.

Senator NORRIS. Yes, sir; indeed.

Senator WORKS. You would probably have no difficulty in adjusting matters in the State of Oregon, because they have more water up there than they know what to do with.

Senator CHAMBERLAIN. We would like to let you have some of it, Senator.

Senator SMOOT. On page 2, line 9, of the bill, it says "only upon finding by the chief officer of the department under whose supervision such forest, national monument," etc. Should not that be only upon a finding of fact"?

Mr. FINNEY. That was also suggested and discussed in the House, and the opinion there was that there should be a little more discretion in that an officer in charge of one of these reservations should not be limited merely to a finding of fact, but that he should be allowed to refuse to sanction it upon the grounds that it might interfere with the purposes of the reservation.

Perhaps I do not quite get your question thoroughly. You mean that you should require him to state his reasons?

Senator SMOOT. This is the proviso. I will read it, and then you will see:

Provided, That such leases shall be given within or through any of said national forests or other reservations only upon a finding by the chief officer of the department under whose supervision such forest, national monument, or reservation falls that the lease will not injure, destroy, or be inconsistent with the purpose for which such forest, national monument, or reservation was created or acquired.

I think it ought to be "a finding of fact."

Mr. FINNEY. Personally I do not see any objection to limiting it in that way.

Senator ROBINSON. That is already taken up.

Senator SMOOT. "A finding by the chief officer," it says.

Senator CLARK. Before a lease may issue he must find it will not injure the forest.

Senator WORKS. I do not think that is very important.

Mr. FINNEY. In other words, your thought is that he should not be just allowed to arbitrarily say he will not, but he should state his reasons?

Senator CLARK. No; it is just the other way—that he shall not grant it.

Senator SMOOT. It shall not be granted until he finds, but I think it ought to be "a finding of fact."

Senator ROBINSON. That is perfectly clear here. He must first find that the granting of the lease will not injure, destroy, or be inconsistent, etc.

Senator Norris. Is not that a sufficient finding of fact? He makes a finding of fact when he says that, does he not?

Senator ROBINSON. Certainly; that is a finding of fact.

The CHAIRMAN. You may stand aside, Mr. Finney.

I had intended to have Dr. Smith, of the Geological Survey, but I am informed that there are two gentlemen present from the coast, one from Seattle and one from Portland, who asked to be heard briefly in order that they may get away to-day, and unless the majority of the committee ask otherwise I shall ask Dr. Smith to waive temporarily for them.

Dr. GEORGE OTIS SMITH. Certainly.

STATEMENT OF MR. JOHN A. BRITTON, VICE PRESIDENT AND GENERAL MANAGER PACIFIC GAS & ELECTRIC CO., OF CALIFORNIA.

Mr. BRITTON. In order to qualify as a witness before the Senate committee, I desire to say that I have for over 40 years been engaged in the public utility business, both gas and electric, and have occupied positions with respect to the financing, engineering, and operation of the companies with which I have been connected.

I read with a great deal of interest a statement made by President Wilson regarding the locking up of the potential powers of the national forests and public lands, and I think he solved the whole question when he said "We withhold by regulation." By that I infer that he meant that the development of the potential powers of the falling water on Government lands was being withheld by regulation, both National and State.

I propose to discuss this bill, with the pleasure of the committee, with respect more to the practical side of its operation than from any other side, as there are gentlemen here I notice who are more competent than I to discuss them from the legal phases, which I would not care to take up in my discussion. I shall give you the judgment of a man who has been engaged in this business ever since the first water power was developed and who aided and assisted in its first development, down to the present time, and who has had experience also in the matter of the generation of electricity by steam.

Before I enter into a discussion of the bill and the particular ...es of it, I think it proper to get your minds into a frame to ... roughly appreciate the fundamental principles which I will touch ...n in discussing the bill, and touch upon the question of the de... opment of water power and the corelated development of steam ... er in the generation of electricity.

The first development of water power of any consequence was in ... and then only in a small way. The first commercial plant that ... ever developed in the United States for the transmission of ... tricity, at a voltage which was created at the power house and ... ed up from the low voltage of generation to the high voltage ... e line, was the plant built at Folsom, in Sacramento County, in ... State of California, and that was made possible by the fact that ... to the time of the invention of electricity a dam had been pro... ed across the American River at that point for the purpose of ... ng out water for irrigating lands below the Folsom prison; ... dam and canal was built with prison labor, making a very ... investment at that time, the State sharing, however, in the ... fits of the falling water by taking the first fall of the water from ... am for the generation of power, light, and other purposes at ... State's prison.

The fall at Folsom was 55 feet; the water used in that fall, 1,250 ... feet, or 50,000 miner's inches, as they measure miner's inches ... California; and the power created was 4,000 horsepower.

To give you an idea of the development that has been made since ... time—and that was in the year 1895, a brief period of 19 years ...—to-day the developments in the southern part of the State, with ... ad of over 2,000 feet, the same amount of water would generate ... siderably over 250,000 horsepower.

The development and the transmission of electricity came along gradually. The plants built in the northern part of the State—and I can only speak familiarly with those located north of Fresno, as I have no information of those in the southern part of the State—were developed along the eastern part of the Sierras and in the ... ers in the northern part of the State, which were not affected by ... nal conditions. The first plant developed was on the South Yuba River, for mining purposes; second, there was an irrigation ... which was taken out of the North Yuba River and used for ... gation of what was known as Browns Valley, near Marysville, ... fall of that ditch being utilized to generate a very small amount ... power, and taking it to Marysville. It was constructed for an irri... tion ditch, and is still used in conjunction with the use of water ... irrigation purposes. Another plant that is still used for irriga... n purposes is the plant at Colgate.

Up to that time, which was about 1899, the total development in ... State of California was not in excess of 10,000 horsepower in that ... of the State.

The people who built the Colgate plant and built the plant on the ... th Yuba River subsequently built what is known as the de Sabla ... on Butte Creek and the other plants now interconnected in the ... ense system of the Pacific Gas & Electric Co. were all California ... and the predecessors in interest of the Pacific Gas & Electric Co. ... exists to-day were all California men. In the beginning these ... er plants were financed in California because we had faith in

its development. We began with a small 3,000-horsepower plant which delivered power around Nevada City for lighting and a little for mining purposes, and have to-day increased that development to practically 200,000 horsepower. That development was made possible by giving to the consumer—the public of the State of California—rates that were comparable with any other energy that could be produced from either coal in the earlier California days, which coal largely came from foreign ports, and subsequently in our oil developments. We have encouraged not only the use of our energy for lighting purposes, but we have built up the State of California to its present industrial importance entirely through the development of the hydroelectric plants and by the cheapening of power thereby.

But I want to call your attention right here to this one fact, that going along hand in hand with the development of hydroelectric power were higher efficiencies in generators, working first under a pressure of 27 pounds per square inch at the nozzle of pipe line up to a present pressure of practically 800 to 900 pounds per square inch, the scientific men began to develop better water wheels and pipe lines that will stand that pressure. The first generators generated practically 750 kilowatts, or about 900 horsepower. To-day generators are directly connected with water wheels and have a capacity of 20,000 horsepower, and those large units and the raising of the voltage from 11,000, the first voltage of any long-distance transmission, which was not brought about without many misgivings by engineers of that day, in 1895, has since increased to 150,000 volts, which are now being transmitted in the southern part of the State. Our highest voltage in our transmission line is 110,000.

From these small plants grew these larger ones, and with them grew the development of the State. The State of California to-day is as prosperous as it is by reason of the cheap power introduced by the hydroelectric companies. The rates in California for light, heat, and power, as served by the public utilities, are lower by practically 50 per cent than in any State in the States that I am aware of, and by far anywhere in the Eastern States excepting perhaps the larger development of Niagara.

We have in California for our regulation, as Senator Works has well said to you, in my judgment, the very best public service commission that ever was appointed in any State of the United States for the regulation of corporations. But from the time of the inception of the generation of electric energy by means of steam down to the time of the organization of the public service commission, under the constitution of the State of California, which was adopted in 1879 and amended in 1884, article 11, section 19 of the constitution provided in all cities of the State of California for the regulation of all public utilities and their rates, they have had nothing to do with reference of regulation of their bond or stock issue. But notwithstanding the fact that regulation was forced upon us in the cities, I can state to you that the companies in the entire State, from the time that they first began the introduction of electricity, reduced their prices as their business increased and as the returns given to them warranted, without regulation excepting in the congested section such as in San Francisco.

In the older days, when electricity first came into use, about the year 1880, and incandescent lamps became a commercial possibility, about the year 1884; prior to that there had been the arc lamp; there were the type of reciprocating engines, and the prime mover for electric service was steam engines, and the cost of the service, by reason of those prime movers, was practically a consumption of from 30 to 35 pounds, in the very best of engines, of steam per horsepower developed. To-day the modern turbine, built by all the manufacturers, has built that efficiency up to a point where about 9 to 10 pounds of steam per horsepower hour is required in the generation. The lines are converging, and I prophesy to you gentlemen to-day that the time is not very far distant when the cost of hydroelectric generation and transmission to central points and the cost of generation and transmission by means of steam power will meet and cross, and that by reason of the cheaper fuels in a great many States, they will reduce the point of economical generation by steam, by reason of its location along some place where water can be obtained for condensation purposes, and steam will become a cheaper prime mover for the generation of electricity than will the falling waters of the streams.

Of course, so far as the company which I represent is concerned, we court regulation. We have been in favor in California of regulation long before the public service commission was created, and there was not a public-utility man in the State that did not welcome with open hands the putting into effect of the laws at present existing.

Of course the commission in that State, like all other commissions, are anxiously groping and looking for enlightenment as to what corporations are entitled to have given to them for their service to the public. There has been two very fundamental decisions rendered by the railroad commission of the State of California involving the question of the costs of hydroelectric power and the costs of steam power and a proper return to the consumer. One case was that of the "Town of Antioch *v.* the Pacific Gas & Electric Co." and the other the case of "Thomas Monahan (being the mayor of the city of San Jose) against the Pacific Gas & Electric Co." In both opinions the commission found that the corporation was entitled to receive 9 per cent upon the reproduction value of property of the Pacific Gas & Electric Co., devoted to the service of the public. It found that the average rate for power delivered to the substations in the district was practically 7.3 mills. Steam power, to revert to that again for a moment, has been generated and delivered practically under the same conditions for less money where the efficiency of these great turbines has been utilized on a high load factor.

I want to deploy for a moment from a discussion of the bill to illustrate what has happened in one of our districts in California, descriptive of the great injustice that may be done by such regulations as are here proposed within this bill. The Pacific Gas & Electric Co., in 1912, undertook the proposition of building a dam in the South Yuba River and by the waters impounded there, through conduits, pipe lines, and power houses, to develop practically 70,000 horsepower. The company owned, in fee simple, the lands surrounding Lake Spaulding and the lands and the waters of the

old Lake Spaulding. It owned in fee simple all the land involved in the aqueduct excepting a portion of a quarter section of forest reserve land. It owned in fee simple every other part of that power development down to its ultimate use, including the transmission lines except a small portion from the power houses to the centers of distribution.

At the upper end of the lake to be created by this big dam and the enlargement of the present lake then in existence, were practically 28 acres of land cornering on the forest reserve, off to the northern end of the lake, 28 acres, more or less, of land—I think not to exceed 30—which would be submerged at certain contours following the height of the dam as raised. The Agricultural Department demanded that the Pacific Gas & Electric Co. take out a permit to cover all of its entire properties, including the right to regulate not only the power houses directly contingent to the Lake Spaulding development, but also every one of their power houses, there being 10 of them in the large system of this company, and to abide by all the rules and regulations prescribed by the Department of Agriculture because, forsooth, in all of this large development, involving over $60,000,000 of invested capital, and this new development, entailing an expenditure of finally over $10,000,000, there were 28 acres of land that would be ultimately submerged, and the water used out of this great reservoir for the purpose of not only the generation of power under the control and regulation of a State commission fixing rates and charges, but the water being used also for the irrigation at the present time of over 20,000 acres of fertile land of the State, and the possible use of that water, after it had been used for power to irrigate over 50,000 additional acres. We protested and were unfortunately forced to bring suit against the Secretary of Agriculture to determine whether he had constitutionally any right to demand of us the permit that he required we should take out.

Senator CLARK. What was the result of that suit?

Mr. BRITTON. It is still pending in the courts.

Senator SMOOT. In what court?

Mr. BRITTON. In the circuit court for the ninth circuit, in California.

Senator CHAMBERLAIN. The Federal court?

Mr. BRITTON. The Federal court.

(Whereupon at 11.55 o'clock a. m. the committee took a recess until 2 o'clock p. m.)

AFTER RECESS.

The committee reconvened pursuant to the taking of recess.

STATEMENT OF MR. JOHN A. BRITTON—Continued.

The CHAIRMAN. We will be glad to have you resume, Mr. Britton.

Mr. BRITTON. I was discussing, as I recall it, just before adjournment, the question of the occupancy of the forest reserve lands by the Pacific Gas & Electric Co., and was about to speak of another feature as showing the great injustice to developments of that character by the rules and regulations now enforced.

We had made, as early as 1905, preliminary surveys from the outlet of the reservoir to the site of the power plant, to secure the largest fall possible and the greatest utilization of the water. In making that survey it passed over a certain section of land which was not, at that time, involved in the forest reserve, but which subsequently and before the construction was begun and before the operation of that plant was placed in the forest reserve, but the only part that affected our construction was a matter of 1,320 feet crossing a quarter section of the forest-reserve lands. The construction of the canal or aqueduct carrying the water, to an extent ultimately of 400 second-feet, passed, as I told you this morning, over land owned by the company, and the aqueduct over the 1,320 feet of forest-reserve lands would have cost, in construction, somewhere between $12,000 and $15,000.

I personally made application to the Secretary of Agriculture to secure a temporary permit without tying ourselves to all the other regulations of the department to pass over and occupy this 1,320 feet of forest reserve lands pending the determination of the suit brought in the Federal court against us to determine the constitutional rights of the Secretary to enforce the rules and regulations. That was declined, and rather than submit to those rules and regulations the company was compelled, at an expense approximately of $15,000, to build a siphon on its own land to get around this 1,320 feet of land.

I think that illustrates, possibly better than any other illustration that may be given to you, what injuries were suffered by the companies seeking the development of water powers in the State of California, and for this extra expense the public must pay.

The California Gas & Electric Corporation, which was the immediate predecessor in interest of the Pacific Gas & Electric Co., was organized in 1903. Prior to that time there had been two or three other power companies working independently, organized independently but organized largely by the same class of men that constituted the control of the California Gas & Electric Corporation which absorbed what was known as the Bay Counties Power Co. and Valley Counties Power Co., and purchased direct from the owners a series of distributing systems to counties that these companies had not theretofore supplied with hydroelectric power and which were all operated by means of more or less obsolete steam plants. And the purchase of electric energy from the hydroelectric plants permitted the whole northern part of the State to be served with energy at a very much lower cost than would have been possible with those separate distributing companies.

At no time during the progress of the life of these subordinate corporations and the Pacific Gas & Electric Co. was any attempt made to enter into competition with existing companies; and the property of the companies absorbed and now owned by the Pacific Gas & Electric Co. were purchased at the fair value as made for them by the different owners of the properties.

I merely instance that to show that notwithstanding the company had at that time a monopoly practically of the water power of the north central part of the State, because it had been energetic in developing them, it did not seek by that monopoly which it had to exercise it unjustly or in any way illegally.

The Pacific Gas & Electric Co. was incorporated in October, 1905, and purchased the San Francisco Gas & Electric Corporation, which then, up to that time, had been a separate company and which was controlled by San Francisco men.

Immediately after its purchase the casualty of 1906, on the 18th day of April, occurred. Had it not been for the ownership by the Pacific Gas & Electric Co. of that San Francisco Gas & Electric Co. at the time of the earthquake and fire, the San Francisco Gas & Electric Co. would have been unable to continue its existence, because the destruction of property and the destruction of business was so great it would absolutely have gone into the hands of a receiver. As it was, being in charge and under the control and ownership of the Pacific Gas & Electric Co., it was enabled to rehabilitate itself and get into service again for supplying electric energy and also gas to the people of San Francisco within an incredibly short time.

Senator WORKS. What cities do you supply other than San Francisco?

Mr. BRITTON. We supply every city with hydroelectric energy lying practically north of San Jose and including San Jose up as far as Chico on the north and the Sierra Nevada Mountains on the east.

Senator NORRIS. How far north is that?

Mr. BRITTON. Chico is about 140 miles north of San Francisco.

Senator NORRIS. How many cities and towns are included in there?

Mr. BRITTON. In our Pacific Gas & Electric Co.?

Senator NORRIS. Yes.

Mr. BRITTON. Approximately 150 cities, towns, villages, and settlements of different character.

Senator WORKS. Does that include the capital of the State—Sacramento?

Mr. BRITTON. Yes; it includes Sacramento.

Senator NORRIS. What proportion of the electricity within the State is developed by water power and what proportion by steam?

Mr. BRITTON. Approximately 50 per cent.

Senator NORRIS. About half and half?

Mr. BRITTON. About half and half; yes, sir. San Francisco, in that connection, I might say, is almost entirely dependent upon steam for energy.

Senator NORRIS. At the present time can you tell us the relative cost of the two, the steam and the water, in the whole business—or whole concern?

Mr. BRITTON. I can approximate the figures, Senator. The railroad commission of the State of California—I think I mentioned that this morning—in a case before it of the Town of Antioch *v.* Pacific Gas & Electric Co., which was brought by that town after it had turned over its power to regulate rates, as provided for at that time by law, to the State commission, made a very exhaustive inquiry into the matter of the cost of hydroelectric energy and steam energy combined, because our steam plants are interlocked with our hydroelectric plants, and found that the average cost per kilowatt hour, delivered to the substation of the company (of which there are about 200 in number), was 7.31 mills, or less than three-fourths of a cent

per kilowatt hour. And while they did not make any exhaustive inquiry into the question of the cost of steam power, we know that steam power to-day can be produced for approximately that sum. As a matter of fact, the cost of steam power in San Francisco, generated and delivered approximately in the same position (that is delivered to a substation for distribution) would cost something less than 8 mills.

Senator NORRIS. What I wanted to know was, in your business, in the development of power, both from steam and from water, taking the entire business, which you say is about half steam and half water power, if you had the figures of what it actually costs you to deliver at the substation from steam and what it costs you from water power?

Mr. BRITTON. I have mentioned those figures, sir. From steam delivery it would be approximately 8 mills at the present time on the basis of the load factors obtaining in San Francisco.

Senator NORRIS. Excuse me, but, as I understand your figures, the finding by the railroad commission included both steam and water?

Mr. BRITTON. Yes.

Senator NORRIS. And included the entire system?

Mr. BRITTON. Included the entire system; yes.

Senator NORRIS. Now, what I want to know, if you can give it to us, taking the entire system just as they did, what is the difference in cost between steam and water power as you actually produce it?

Senator WORKS. You mean cost of production, do you?

Senator NORRIS. Yes.

Mr. BRITTON. Do you intend to include in that interest on investment, depreciation, or any of those things? Do you intend to include ultimate cost or simply operating cost?

Senator NORRIS. It does not make any difference. I want you to include everything the railroad commission included. In other words, I wanted to see if there was a difference, because I was very much impressed this morning with your statement that steam was going to be, ultimately, cheaper than water power, and I wanted to know the actual facts which obtain in each case, for developing electric energy by hydroelectric power and for developing energy by water power, to see what your experience had been in that respect, and to include everything the State commission included in the cost of delivering the power. And that, I understand, includes interest. I want you to include everything that it included, and I take it they would include everything that was proper. I wanted to see what the difference in cost was between the two for delivery at the substation.

Mr. BRITTON. It would be a matter of conjecture, Senator. When the case arose we would have to project every condition of service of the hydroelectric system and try to find, first, if it was being supplied from a steam plant, properly located, to determine that cost.

Senator NORRIS. I only asked the question because I thought you might know, but I do not care to take up any time with it.

Mr. BRITTON. I could not answer direct.

Senator WORKS. At what price do you deliver your supply in San Francisco now, per kilowatt hour?

Mr. BRITTON. At varying rates. Our rates at the present time vary from 7 cents down to as low as three-fourths of 1 cent.

Senator WORKS. Does that depend upon the quantity of supply?

Mr. BRITTON. Yes, sir; and the character of the load. It depends upon whether the man uses the power continuously, gives us a very high load factor; that is, continues to use the maximum demand during the greatest number of hours of the day, or only uses it as the ordinary householder for an average of an hour and a half a day.

Senator WORKS. What service is the highest maximum?

Mr. BRITTON. The ordinary lighting of the buildings, including the ordinary uses and ordinary appliances.

Senator WORKS. And that is 7 cents?

Mr. BRITTON. That is 7 cents per kilowatt hour, with a sliding scale running down as low as 4 cents per kilowatt hour and depending upon the quantity used.

Mr. Finney, in his testimony yesterday before the committee, called attention to the fact that there was a certain control by what is ordinarily called a power trust in existence in the United States, and in the hearings before the House committee considerable stress was laid upon that fact. And he quoted, in his statement to you this morning respecting the interlocking directorates, as probably having some influence upon the minds of Congress as to the necessity for the detection by Congress, or by other means, of the men who really control the power trust (and in that particular case, cited the Pacific Gas & Electric Co.), as I remember—a statement made on page 626 of the proceedings before the House committee, where it is stated, quoting from a circular sent out by the company:

> Our operations extend into 30 counties of central California, containing about 66 per cent of the population of the entire State. Over 200 communities are served in this territory, including 8 of the 11 largest cities in the State, furnishing electricity to some 209 towns with a total population of approximately 980,000, among which are San Francisco, Oakland, Sacramento, Berkeley, Stockton, and others; also the entire street railway system of Sacramento.
>
> It is hard to dispute the fact that this corporation has largely monopolized the utility and water power situation in the territory it serves; but if there is any doubt of monopolization by this corporation it is removed by its own published statement, as follows:
>
> "By the control, on the one hand, of the best and most economical water-powers and, on the other hand, of the markets for power through the ownership of the distributing companies in the principal cities and long-term contracts with users of power, the business of the company is beyond reach of serious competition."
>
> There can be no gainsaying the statement that this corporation is "beyond the reach of serious competition," when we learn that it controls 181,327 developed horsepower and 100,000 undeveloped horsepower, all water power. How successfully it has controlled "on the other hand, the markets for power," is indicated in the claim that in 1912, 321,092 consumers of gas, electricity, irrigation, and water were on its books, and its street railways carried 11,926,698 passengers.

The statement as made is an absolutely correct one, but I want to dispute the fact that by reason of that system the company which I represent has in any way a monopoly unregulated by the State of California. The commission of the State of California regulates matters of this kind in its entirety.

Mr. Eshelman, who is the president of the railroad commission of the State of California, in reply to a message sent to him by Congressman Kent, effectually disputes the fact that ownership and

ntrol of such a large extent of territory as this was any factor in nnection with the matter of a direct monopoly as is regarded the Pacific Gas & Electric Co

Mr. Eshelman said, in reply to a telegram sent him on May 8, 1914, nd in reply to one of May 11:

> • • • The commission certainly will not recognize face value of stock issued as a basis of rate making. We have not at hand the data showing tual cost of these lands to the present time. The commission does not rize the capitalization of water rights, nor has it authorized the issue stock or bonds on public utility properties over and above reasonable cost.

The Pacific Gas & Electric Co. entered this field as a pioneer, and it has developed the field to the fullest extent, given the people light, eat, and power; developed thousands and thousands of acres of land hat had been arid before, by the possibility of getting cheap power for irrigation purposes; encouraged manufacturers in the State, and ought industries to the State that never would have come without the possibility of getting cheap power; developed the manufacture of cement by giving a rate for power that made it possible to sell ment in markets in competition with cement from foreign and stern markets, and rather than be classed as a monopoly by reason of that fact I submit it should be classed more as a philanthropist for what it did for the benefit of the State of California.

Senator WORKS. In what way do you aid irrigation?

Mr. BRITTON. By pumping.

Senator WORKS. You are not engaged in supplying water for irrigation?

Mr. BRITTON. We are, in Placer County, supplying possibly [illegible] acres of land with water by the gravity system from the same reservoirs that store water for power purposes; and with the completion of the enterprise I spoke of this morning, at Lake Spalding, there will be sufficient water to irrigate 50,000 acres more of land.

Senator WORKS. Do you think it is a wise thing for the Government to grant these reservoir and dam sites exclusively for power purposes?

Mr. BRITTON. I can not conceive, Senator, where it would be necessary to limit the grant of power in order to cause the conservation of water; especially in our State, and particularly the section I represent, power is generated at such an altitude, where there is no land accessible to the irrigation lines between the surveyed water reservoirs and the power house, where the water leaves it, that is available for irrigation.

Senator WORKS. I understand that usually water for power purposes would still be available for irrigation below, and I am talking about this, that is, it may be there is only one site on the entire tract where it would be practicable, at a reasonable cost, to put in a dam and store water. Certainly it would not be good policy for the Government to grant that particular site for power purposes, would it? I am asking you, now, as a power man.

Mr. BRITTON. And also as an irrigation man?

Senator WORKS. Well, to a slight extent.

Mr. BRITTON. To some extent, yes. I could not answer that question fairly, Senator. At the present time, in view of what I have said you before, that I believe the day is rapidly coming when water

powers will not be of the value they are now thought to be, it might be well to preserve in the Government the right where it seemed a superior use for that water would be its use for irrigation.

Senator WORKS. In your own case you are supplying water for both purposes from one reservoir?

Mr. BRITTON. From a series of reservoirs.

Senator WORKS. Of course, if you are not willing to go into the business of furnishing water for irrigation purposes the people of that section would be denied that right if you held that system exclusively for power purposes. That is what I am talking about. In effect, I think it is depriving the people who need that water for irrigation purposes from using it, with the facilities for supplying it. That would not be a good policy.

Mr. BRITTON. I should think not, as a matter of general use.

Senator NORRIS. In your case, where you supply water for irrigation, has that water first been utilized for power purposes?

Mr. BRITTON. It has; yes, sir.

Senator NORRIS. You have no instance in your case where you ever supply water for irrigation that has not first been through the water wheel?

Mr. BRITTON. Only in one case. In the case of the Yuba plant on the North Yuba River, that I spoke of, a certain amount of the stream flow is allowed to go by the penstock of the power plant and discharge into the valley for irrigation purposes.

Senator NORRIS. Was not that used for irrigation at the time you built your dam?

Mr. BRITTON. Yes, sir.

Senator NORRIS. So that you had, under the laws, to permit that much to go by?

Mr. BRITTON. Yes, sir.

Senator NORRIS. You did not supply the water to the community, did you?

Mr. BRITTON. No.

Senator NORRIS. So that it is true, as far as the water you control is concerned, that you supply none for irrigation that has not first been through the water wheel?

Mr. BRITTON. That is true.

Senator CHAMBERLAIN. That is a prior appropriation.

Senator NORRIS. The case he speaks of; yes.

While you are on that subject, I neglected to ask you whether in the power that you create in your company by steam you use coal or oil?

Mr. BRITTON. Oil.

Senator NORRIS. Oil entirely?

Mr. BRITTON. Exclusively; yes, sir. There is no other fuel in California.

Senator NORRIS. In connection with the use of coal: For instance, take California; if it were not for the cheap oil that you have there you could not begin to compete with waterpower, could you, or if you had to use coal?

Mr. BRITTON. No, sir; you could not; because there is no coal in California.

Senator NORRIS. It all has to be shipped in?

Mr. BRITTON. It all has to be shipped in. There is a class of bituminous coal there, a lignite, that is not available economically for

steam generation. In the early days when electricity was generated by steam our steam coals were brought there from Vancouver or Australia.

Senator NORRIS. In your estimate that steam will be used in the future more economically to produce electricity than water, do you base that on the theory that the place where it is produced would have to be somewhere within a reasonable radius of coal mines where coal was developed, or oil?

Mr. BRITTON. Not necessarily; no, sir. At the present time oil is selling in California at a price, in quantities, that would represent coal in the Eastern States at about $1.80 a ton.

Senator NORRIS. I understand that, and that is the reason you can produce it?

Mr. BRITTON. That is the reason we can produce it.

Senator NORRIS. But, for instance, if you were to go out in Nebraska, where they have no coal and no oil and you did have water power there, you would not be able to compete there, would you, by shipping in coal in places of that kind?

Mr. BRITTON. Certainly not; no, sir.

Senator NORRIS. Can you give us any idea, in your estimate that coal is the cheapest, what the price of coal would have to be upon which that kind of an estimate is based?

Mr. BRITTON. Taking the present and prospective efficiency of prime movers and steam as they are to-day developed, I should say that coal would have to reach the figure of $3.50 to $4 a ton——

Senator SMOOT. That would not be the best coal, but it would be run of mine?

Mr. BRITTON. It would be run of mine; yes, sir.

Senator WORKS. Mr. Britton, going back to the question of prior water rights that you had to take care of, there was no storage water connected with that right, was there?

Mr. BRITTON. In the one I speak of where the water goes by for irrigation purposes?

Senator WORKS. No; in the one that existed before you took the water yourself, which you had to recognize. That was simply taken from the natural flow of the stream?

Mr. BRITTON. That was simply taken from the natural flow of the stream.

Senator WORKS. Are you utilizing the full flow of the stream the year around for your purposes?

Mr. BRITTON. Oh, no.

Senator WORKS. There is a surplus water there still that might be stored, with proper facilities, over and above what you are using?

Mr. BRITTON. At certain seasons of the year.

Senator WORKS. Of course. There are only certain seasons of the year when you can store water in California.

Mr. BRITTON. Take the condition of that particular stream, the North Yuba River. The whole country is overlaid with a lava cap, evidently resulting from the eruptions of Mount Lassen in days gone by, and that forms a natural reservoir for the melting snows of the mountain and the snow cap the year around, because the minimum flow of the North Yuba River very seldom falls below the amount of water required for generation of electric power at that power plant, which is 350 second-feet.

Senator WORKS. Was the water of that stream considered by San Francisco at the time she was looking for a water supply?

Mr. BRITTON. I never heard of that, Senator, if it was.

Senator WORKS. Well, with proper facilities for constructing the necessary dams, there is water there yet that might be taken and used for irrigation purposes and leave the supply you need intact?

Mr. BRITTON. Oh, yes.

Senator SMOOT. Before you leave the question of monopoly of water powers, I will ask you if you have noticed the diagram or map found on page 382 of the House hearings showing interlocking directorates of electric-power companies, and each line on the diagram represents one common director?

Mr. BRITTON. Yes, sir; I noticed that.

Senator SMOOT. Have you examined it closely enough to state whether those lines do represent the true condition of the directors in the different electric-power companies?

Mr. BRITTON. I necessarily have no information, Senator, respecting power companies other than my own.

Senator SMOOT. Then, I will ask you if you have examined yours?

Mr. BRITTON. Yes.

Senator SMOOT. And do you find it correct?

Mr. BRITTON. So far as it states the relation as between individuals and this company, yes; that is true. You notice that the diagram calls attention to the connection of Samuel Insull, of Chicago, with the Pacific Gas & Electric Co. as a director of that company, interlocking him with other directorates. And in the appendix, with respect to that, it mentions the holdings of Mr. Insull and quotes from a journal published in New York to the effect that he had become the purchaser, together with a syndicate, of 40,000 shares of Pacific Gas & Electric Co.'s stock. That statement was absolutely untrue and incorrect, so far as our records show.

Mr. Insull became interested in the Pacific Gas & Electric Co. as a director, it is true, when he bought approximately 10,000 shares of its stock, because it was in his judgment a good investment to make; but, by reason of his stock ownership in the Pacific Gas & Electric Co., he controls the company in no way, shape, or manner, directly or indirectly. It is an absurdity. The company is controlled entirely by the California men that I mentioned to you at the outset, and it has been our pride that the Pacific Gas & Electric Co. has been a corporation controlled only by men interested in affairs in California. If there are holdings by other men in other institutions, they do not in any way represent or control the Pacific Gas & Electric Co.

As a compliment to Mr. Insull, who is probably the ablest man in our line of business in the world, he was made a director of the company. I do not believe he has been to the Pacific coast to attend a single meeting since he was complimented by being made a director.

I have in my possession, just upon that line, Senator, if the committee will indulge me, some few facts in connection with the holdings of our company, to show how absurd it is to claim that by reason of any individual holdings of the company that it can be controlled by that holding or by any connection of that individual holding.

We have issued 508,593 shares of stock, both preferred and common, representing a par value of $50,859,300.

Senator SMOOT. Both preferred and common?

Mr. BRITTON. Both preferred and common.

Senator SMOOT. Do you mean that for each share of preferred you have one share of common, or is that the total?

Mr. BRITTON. That is the total.

Senator SMOOT. In what proportion was that issued?

Mr. BRITTON. There is $32,000,000 of common and eighteen million and odd of preferred issued at the present time. There was $10,000,000 of preferred originally, and that has been increased recently by permission of the railroad commission of the State of California.

Of that, the Pacific Coast States holders represent 3,976 stockholders out of 5,792 stockholders, and holding 234,751 shares; in the Middle States 65,000 shares; in the Eastern States 165,000, and in Europe 42,000.

Of that, the employees are the holders and owners (1,621 employees out of approximately 4,000 at the present time) of $548,600 worth of the first preferred stock, and our consumers own 1,325,000 of the new preferred stock.

In that connection I want to say that a campaign was made some time ago by us for the sale of this preferred stock, and we sold the employees and consumers of the company (those direct consumers who purchase energy from us) for the purpose of making it still further a California corporation.

Senator WORKS. What was the occasion of issuing that preferred stock, Mr. Britton?

Mr. BRITTON. During the progress of the building of the Lake Spalding and South Yuba development it was necessary to borrow money. Bonds were not salable. Our bonds which were authorized to be sold for that improvement by the railroad commission of California could not be sold, and we had to borrow money—as nearly every other corporation in the United States did—wherever we could borrow money. We borrowed $7,500,000 in New York City on short-time notes and, unfortunately, had to pay for it at that time 10½ per cent per annum. So, for the purpose, then, of financing ourselves and paying this debt and paying the other company, there was sold this preferred stock.

Senator NORRIS. What rate does the preferred stock bear?

Mr. BRITTON. It bears 6 per cent.

Senator NORRIS. Is that stock cumulative?

Mr. BRITTON. Yes, sir.

Senator NORRIS. And the common stock is entitled to no dividends until that is paid?

Mr. BRITTON. No, sir. And at the request of the railroad commission of California we filed with it a list of the 10 largest stockholders of our company. Mr. Frank G. Drum, who is the president of our company, is the holder of 17,765 shares; William P. Bonebright & Co., representing the stock of others, is the holder of 15,604 shares, out of 508,000. The Pacific Lighting Corporation, which is a Los Angeles corporation, and which invested its sinking-fund money in the stock of this company as an investment, is the owner of 12,000; Mr. L. J. Hart, 11,000; Mr. Samuel Insull, 10,132; Mr. J. C.

Cebrian, of California, 5,392 shares; A. Iselin & Co., 8,409 shares; Equities Securities Co., 7,826 shares; Illuminating & Power Securities Co., 6,500 shares; and the Public Utilities Corporation, 5,500 shares.

The average holdings of our company are about 60 shares per stockholder, showing it to be very extensively distributed among the stockholders of the company.

Senator CLARK. What is the par value of that stock?

Mr. BRITTON. One hundred dollars.

Senator WORKS. In California the railroad commission has the power nominally to fix rates and determine what bonds shall be issued, and what for——

Mr. BRITTON. And at what price?

Senator WORKS. And at what price?

Mr. BRITTON. Yes, sir.

Senator WORKS. And it also has control over the issuance of preferred stock, has it not?

Mr. BRITTON. Yes, sir. It was under an order of the railroad commission we have issued this preferred stock, and we were permitted to sell at $82.50 a share; that was the minimum price fixed by the commission.

Senator SMOOT. What rate of interest does it carry?

Mr. BRITTON. Six per cent.

Senator NORRIS. You could not get any higher price at that time?

Mr. BRITTON. No, sir. We sold at that price enough to produce seven and one-half millions, selling on the installment plan to the stockholders of record by giving them preference, and after they declined to take, neglected to take it themselves, the employees and our consumers and the general public of California were invited to subscribe.

Senator NORRIS. I want to ask you in regard to the corporations which you bought up: As you developed, did you in those cases maintain those corporations as subsidiary organizations, or were they dissolved?

Mr. BRITTON. We maintained all of those that had a bonded debt only, and dissolved those that had none.

Senator NORRIS. How many subsidiary corporations have you now, if you know?

Mr. BRITTON. I presume there are between 19 and 20; about that number.

We refer to monopoly——

Senator SMOOT. Was there any other reason than that they were bonded that caused you to allow them to remain as subsidiary companies?

Mr. BRITTON. That is all.

Senator SMOOT. If they had not been bonded, of course you would have dissolved them?

Mr. BRITTON. We would have dissolved them, yes; because in connection with the buying of stock of any of the companies we bought the absolute property, except in one instance, and then the property was transferred subsequently.

Senator WORKS. And those corporations are being operated by the main corporation, are they—their affairs?

Mr. BRITTON. Yes, sir; in fact, under the entire ownership of the Pacific Gas & Electric Co., all of the property has been deeded to the Pacific Gas & Electric Co., which now owns it. There is no such thing as a holding company in our affairs; the Pacific Gas & Electric Co. is an operating company.

Senator NORRIS. Suppose you bought a corporation supplying light to the same town, is the light supply now in the name of the original corporation?

Mr. BRITTON. No, sir; in the name of the Pacific Gas & Electric Co., which is the operating company and the owner of all of the properties in fee.

Reverting to the question of monopoly. In 1906 and 1907 there was incorporated the Great Western Power Co., which purchased the property of the City Electric Co., a subsidiary company operating in the city and county of San Francisco. The Great Western Power Co. became a very active competitor of the Pacific Gas & Electric Co. The Sacramento Valley Power Co. was at that time operating in the northern part around about Chico and became an active competitor of this company. So that the entire field, practically, of this company—that is, the remunerative field—has been covered and was covered prior to the creation of the railroad commission, by competing companies.

And we have competition in San Francisco. There were four companies operating in competition with the Pacific Gas & Electric Co. in San Francisco at one time, and in and around Oakland, and the Northern California Power Co., the Sacramento Valley Power Co. throughout the valley counties and around the Bay, and the Great Western Power Co., and up north the Sacramento Power Co.

Senator CLARK. Were they using water power?

Mr. BRITTON. The Great Western Power Co. was entirely operated, until it secured the City Electric Co., from hydroelectric power.

Senator WORKS. What effect did that competition have upon prevailing rates?

Mr. BRITTON. It cut rates in some cases more than half and they have continued. Under the public-utilities law of 1912 they have practically remained as they were, as the result of competition, because we were forbidden to raise our rates by the law.

Senator WORKS. When did we first really have an effective railroad commission?

Mr. BRITTON. Not until March 23, 1912.

Senator WORKS. Did this competition exist before that time?

Mr. BRITTON. Oh, yes. Beginning strongly about 1907 and at all times in California there has been competition, and severe competition, existing in the northern part of the State, even before hydroelectric power was developed. But we practically discontinued that ruinous competition when we purchased all of these smaller companies. There were sometimes two or three companies operating in one little village.

Now, to give an example of the result of that competition which the railroad commission is seeking to wipe out by its recent rules and regulations, the Great Western Power Co. invaded the field in the Sonoma Valley where there are three towns of approximately three to four thousand population. We had covered the entire

territory. We were serving every applicant for power or for lighting. The railroad commission on a hearing—the first hearing had before it—decided that competition should be permitted; that we were not giving the service that we should have given; and had not met all of the demands made upon us for service. Of course, we demurred to that decision, but submitted.

The Great Western Power Co. built, at very large expense, from its transmission line a distributing line into this valley and lines into the adjoining territory and began service. The first year after it had been there in service the reports submitted to the cities as required by them in the fixing of rates disclosed the fact that this competition of the Great Western Power Co. with the Pacific Gas & Electric Co., in possession of the territory, resulted in no marked additional revenue; that the same total revenue of both companies was nearly equal to the revenue of the one that was already operating in the field. And there was an additional investment involving hundreds of thousands of dollars that had been made and was not earning anything upon the investment. And for that particular reason I thing commissions all over the country are recognizing the fact that the regulation of monopolies is more beneficial to the capital invested and eventually to the consumer than is competition as it has been allowed to exist.

Senator WORKS. I was going to ask you whether that is not the opinion, practically, of the railroad commission of California.

Mr. BRITTON. Yes, sir. If you will allow me I will read from the opinion rendered in 1913 by the Public Service Commission of the State of California, in the case of Aro Electric Co., which was after a hearing had to determine whether they had the right to enter the city of Stockton, or not. Mr. Eshelman says:

"This new State policy of competition between public utilities is not in itself necessarily a good thing. Whether or not it is a good thing depends upon the results which flow from it in each particular case. If just as good results can be secured by regulation and supervision under State authority of an existing utility which has a natural monopoly, so that the rates and service enjoyed by the public are as good as they reasonably could be under normal competition, then the consuming public has nothing to gain by competition, while that portion of the public which invested its funds in the securities of the existing utility may have much to lose by competition which will not result in any better service nor lower cost to the consumer than already derived from the existing power."

Senator CHAMBERLAIN. Did this company that you name, which came into the three towns you mentioned, have the effect of reducing the rates, or were the rates maintained by your company the same as they were before its competition?

Mr. BRITTON. No; the rates were reduced.

Senator CHAMBERLAIN. Was not the general complaint made that the rates were too high when the competing company was allowed to come in?

Mr. BRITTON. Yes, sir. That is the general complaint of every community served by a public utility.

Senator CHAMBERLAIN. Is the competition still in force?

Mr. BRITTON. The competition is still in force, yes, sir; it is still continuing.

Senator NORRIS. Do you know what the rates are, as a matter of fact, in those towns?

Mr. BRITTON. They vary from 7 cents for ordinary residence lighting, down to practically 2 cents for power; about 2 cents per kilowatt hour for irrigation.

Senator NORRIS. What were they before this competing company went in?

Mr. BRITTON. They were 8 cents down to practically 2 cents.

Senator WORKS. Are the rates the same in those smaller towns, Mr. Britton, as they are in San Francisco?

Mr. BRITTON. Yes, sir; practically the same, for the same character of service.

Speaking of the cost of power, there has been some misleading of the House in the testimony given by Mr. Merrill, if I may refer to it now, as it particularly affects our company and I have knowledge of it, and I would like to correct portions of it.

Mr. Merrill submitted to the House committee a statement, being a copy of the statement filed by the Pacific Gas & Electric Co., showing its operations in the city and county of San Francisco for the year 1911, and brought out the fact that the cost of power delivered in San Francisco was practically $190 a horsepower year. Evidently it was brought out for the purpose of showing at that time that steam power was very much higher than hydroelectric power, and therefore the hydroelectric, of course, had a greater value by reason of that fact.

The statement was absolutely correct and was a sworn statement by me, filed with the board of supervisors in the fixing of the rates for 1912–13. But the fallacy of it was in the conclusions drawn with respect to the cost of power. He called attention to the fact that 91 per cent of the power used in San Francisco was steam generated power and but 9 per cent hydroelectric. As a matter of fact San Francisco has always been a steam operated plant. In the congested centers of population, all the big cities such as San Francisco and Los Angeles, were never dependent, and could not be made dependent entirely upon hydroelectric transmission with the uncertainties of a constant and continuous service as required in a large city, due to long distance transmission lines.

And the fallacy too of the computation he made of $190 was upon the question of the mere delivery of a certain number of kilowatt-hours. He afterwards, and very fairly, called attention of the committee to the difference between the cost of a high load factor service and a low load factor. As a matter of fact, in my judgment, when these questions of the costs of power are given a layman, full consideration should be had as to the conditions under which that power is delivered. In my judgment, too, whenever we discuss the question of what power costs a company, delivered, it ought to be computed upon the necessary installation of that company and not upon use by the consumer which the company can in no way control. In our hydroelectric development our power costs are naturally in accordance with the amount of power necessary to take care of the wide demand, because every power plant, whether steam or electric, must be constructed so as to meet any momentary demands made upon it in any hour of the 24, even though, as used in olden

days, the power was being used only an hour and a half a day and for the other 22½ hours a day lying idle. But if you require 10,000 horsepower during any part of a day, you have to have your boilers, engines, feed wires, and equipment necessary to take care of that 10,000 horsepower when you are called upon to take care of it. And therefore the installation is, in my judgment, the factor in the cost of power that should be used, and the cost computed upon that basis, on our whole system, is $35 a horsepower year in place of $190 a horsepower year that Mr. Merrill calls attention to. And that is our entire system.

Senator NORRIS. What do you mean by "horsepower year"?

Mr. BRITTON. I mean the cost per year.

Senator NORRIS. Of 1 horsepower?

Mr. BRITTON. Of 1 horsepower; yes, sir.

Senator WORKS. By what title do you hold the power sites that you are now occupying?

Mr. BRITTON. In every case—you refer now to sites where our power house is located, or dams and——

Senator WORKS. Well, both; whatever you occupy as a part of your system.

Mr. BRITTON. Our title varies. In some districts we hold by proscriptive right, and on the South Yuba River we hold by that means, having secured by purchase the rights formerly owned by the South Yuba Mining Co., which had acquired in the old days, under the then law governing appropriations of water, dams, and ditches for the purpose of furnishing water for hydraulic mining in California. In the case of the Mokelumne River, our second largest power house, we own that by proscription—the water right, I mean. The lands we own in fee. In others we hold by appropriation, and in the North Yuba River and Butte Creek we hold by direct appropriation of the water under the State law.

Senator WORKS. Do you occupy any public lands?

Mr. BRITTON. With the exception of the 28 acres of land I mentioned within the forest reserve, at the upper end of Lake Spaulding, and a very small section of land on our transmission lines, we do not occupy any public lands within my knowledge.

Senator WORKS. How is it with your competitors, do you know

Mr. BRITTON. As I understand, in the northern part of California the California Power Co., which is the most northern of our competitors, is almost entirely on public domain; the Great Western Power Co. is almost entirely on public domain, and the Sierra and San Francisco Power Co. is largely on public land. We are not, with the exceptions that I have mentioned. And I call your attention that as the reason why there should be some differentiation as between this occupancy of public land with relation to the value has in their development.

Before I leave that I would like to call your attention to this Mr. Merrill also in his testimony called attention to the fact emphasizing power control by syndicates, especially with relation to our company, that immediately after Mr. Insull bought into our company there was a change in the directorship by which three new people came in, indicating that the syndicate was already getting its tentacles around us and was about to exercise its powers.

have the original list of directors of the Pacific Gas & Electric Co. I will mention, in passing, the names of those three men and their relation then to our company. The following are directors:

Frank B. Anderson, who is president of the Bank of California, is a large stockholder in our company; Henry E. Bothin, a capitalist; myself, as first vice president and general manager; William H. Crocker, one of the largest stockholders and one of the men from whom we purchased the electric power plant or standard electric system, operating on the Mokelumne River, and which, by the way, was organized to operate a hydroelectric plant about 1900, just after the Blue Lakes Power Co. had started out to build lines into the towns of Jackson and Sutton Creek for the purpose of supplying power to those towns. It subsequently determined to enlarge its plant and build into Stockton, which it did, and then came down by Oakland and around by the southern end to San Francisco, with a branch line running to San Jose. It secured little or no consumers. The Bay Counties Power Co., operating north of the Yuba River, had to build a transmission line 142 miles into Oakland. It did not attempt to reach the Bay of San Francisco. And when we purchased the Standard Electric Co. of California, in 1904, it was not paying and had not earned a dollar upon the stock, and which company was capitalized for $5,000,000. We bought that company in for $3,000,000. And $5,000,000 was really expended in that plant in its building, and yet the owners of it were anxious to sell, as it was a losing venture, and we secured it for $3,000,000, and never have capitalized it for any more than $3,000,000.

Senator CHAMBERLAIN. Did you raise the rates?

Mr. BRITTON. We did not, sir. We always have lowered rates, from the time I first went into business until the present time, without any regulations being had, because, except in the city of San Francisco, although the constitution gave them authority so to do, the board of supervisors or city council did not exercise the right it possessed. And I take it it was for the reason that there was always a voluntary reduction of the rates.

I recall when I went into business 40 years ago that gas was selling in the city of Oakland, in which I was located, at $6 a thousand. To-day it is selling for 90 cents. And every reduction of that company was made without anybody's suggestion or without any examination or any regulation. The first cost per kilowatt hour for lighting furnished the city of Oakland was 40 cents. To-day it is 2 cents and down to as low as three-fourths of a cent, and that has been done without any insistence by any regulatory body.

Mr. Frank G. Drum, another director, a San Francisco man and having interests in a number of enterprises there; his brother also, John S. Drum, who is president of the Union Savings Bank & Trust Co.

F. T. Elsey, who was one of the men elected as a director at the time Mr. Merrill speaks of, is Mr. Drum's confidential clerk. And Mr. Gladstone and John G. McKee—Mr. McKee, who was president of the Mercantile National Bank of San Francisco—were elected directors pending determination by the other directors as to the men they would finally elect to fill vacancies caused by resignations of men like John Martin and Eugene J. de Sabla, who had been

pioneers of the industry and the men who were responsible for the upbuilding of hydroelectric power in California, and men who did more to produce the prosperity of California than any other two men. Having other interests, they sold out and wished to be retired, and temporarily these men were elected to fill the vacancies.

Mr. Elsey is a clerk in Mr. Drum's office. Mr. Gladstone is in New York, engaged with N. W. Halsey & Co. in Wall Street. The reason for his election was that we have to have in New York an officer who is authorized under our by-laws to transfer stock, and he is a clerk in the office of Halsey & Co. and merely exercises the right, under our by-laws, to sign his name to our stock certificates to oblige the owners of our securities in the East.

William G. Henshaw, who is a banker and a man in charge of a great many large industries of California, is a native of California.

Mr. A. F. Hockenbeamer, our treasurer; Samuel Insull, of whom I have already spoken; Mr. C. O. G. Miller, a capitalist of San Francisco, native born, and largely interested in all of the industries of California; and George K. Weeks, of N. W. Halsey & Co., who, by reason of the very large holdings of our stock, we desired to have represented on our board of directors.

And I can say to you gentlemen that since I have been in our corporation, ever since its existence, nobody has come to me and made any suggestion to me, even when I was president of the corporation, nor does the president of this corporation, Mr. Drum, say to me now, nor has anybody ever said anything that led me to believe that anybody other than the stockholders whom I represent control this corporation. And no suggestions of a combination nor any suggestions of a monopoly by this company have ever been made to me, because under the decisions of the commission of California such a thing as a monopoly to the detriment of the consumer is impossible at the present time.

Mr. Merrill desires me to say that the statement in respect to these interlocking directors was not Mr. Merrill's statement at al, but was a statement submitted by Mr. Pinchot, by Mr. Slattery, who, I believe, is connected with him.

Senator SMOOT. I believe you said it was presented by Mr. Merrill, and I believe the testimony shows that.

Mr. BRITTON. He presented the chart.

Mr. MERRILL. I presented the chart and I submitted it without comment. The testimony that Mr. Britton has been reading is of somebody else.

Senator SMOOT. I notice that you submitted it saying, "I submit this as simply showing what has been and what is being done."

Mr. MERRILL. Yes.

Senator SMOOT. In that connection I want to say, Mr. Merrill, this was not submitted to the committee, was it? It was submitted some time afterwards and none of the committee had a chance to examine it.

Mr. MERRILL. Yes; that chart, the original of which that is a photograph, was presented before the committee during the entire time of my testimony before the committee.

Senator SMOOT. At what time was it submitted?

Mr. MERRILL. It was submitted at the time I gave my testimony before the House committee, a big chart about as large as the maps

e that roll, and suspended in the committee room during the entire three days I was testifying before the committee.

Senator SMOOT. That was within about two days of the closing of the testimony?

Mr. MERRILL. Three or four days before the closing of the testimony.

Mr. BRITTON. Before I leave that, I want to say in that connection, that Mr. Insull, who seemed to be the one director referred to as one of those elected at the beginning of the interlocking directors to control it for such purpose as might be in his mind, has never, since he became a director in the company, talked to me concerning the control of the company's business nor has any other person ever attempted to do so.

Senator SMOOT. I notice his name, however, covers the interlocking directorates as far as your company is concerned, all over the country.

Mr. BRITTON. I do not mean to insult the intelligence of this committee by saying how absurd such a possible connection can be. I won't dwell upon that; it is so absurd it does not need any argument.

Now, taking the act up by sections and reviewing it from the practical point of view of an operating man. And I desire to say that it will be entirely from the standpoint of an operating man, and I will not attempt to dwell upon any of the legal features of it because Judge Short, who represents us as counsel in the suit against the Department of Agriculture, will be competent to answer any of those questions as they come up.

The first question is the question of tenure.

There is no question in my mind that the provision in the bill, beginning on line 14, "For a period not longer than 50 years," will prevent the financing of any future projects of this character, if anything else in the bill would have the same effect. People who invest their money in an enterprise of a public character are concerned as much in the return eventually to them of the moneys so invested, and more so, than they are in the question of the annual return which they may receive upon their investments. And when tenures of that character are liable to be terminated at the will and pleasure of the government there would be no means provided, in my judgment, by which the proper investments made on behalf of an enterprise of this character can be in any way returned. If the tenure is certain and known, there is then a possibility of that happening, that provision can be made for its proper return.

The CHAIRMAN. You think there ought to be a certainty - some definite term?

Mr. BRITTON. Some definite term, yes.

The CHAIRMAN. 50 years, more or less?

Mr. BRITTON. I think it ought to be 50 years and to continue thereafter until terminated through some action of the Government in taking it over for the benefit of itself for purely public purposes and not for the purpose of going into competition with other companies operating in the same field. I think it ought to be practically a perpetuity, because if a company operating an investment of this character for 50 years gives, under proper regulations of State com-

missions, a service to the public that is reasonable in rates and high class in service, it ought to be permitted to continue that life unless the Government desires, as I say, for some public purpose, to take it over.

The CHAIRMAN. Then putting it at some fixed term of years, what will you say about the length of time?

Mr. BRITTON. It ought not to be less than 50 years because in the present progressive state of the science of electric distribution no man can say what will happen. Plants that 10 years ago were considered absolutely for the highest efficiency are to-day merely junk, and the progress of science makes it so uncertain that no one would want to put in anything to-day that might by the termination or the cessation of the lease in a brief period of time be determined to have no value. And capital investments by reason of this progress, will have to be continued a longer term to average up the investments and get a return.

I do not believe, gentlemen, there is a plant in existence to-day that was in existence when steam generation of electricity was first started, and a great many of the water-power plants first started are to-day mere heaps of junk.

Senator WORKS. How have the securities, the bonds of a corporation of this kind, been regarded by investors? Are they of ready sale?

Mr. BRITTON. They have not been in the past two years, no, sir; they are not now of ready sale.

Senator CLARK. Do they differ in that from other securities?

Mr. BRITTON. I do not imagine they do at the present time.

Senator WORKS. I asked that question because I know bonds of irrigation companies have been very difficult of sale. We know that very well in California.

Mr. BRITTON. Yes, indeed. I think it is due to the uncertainty of the tenure under which these companies are dependent upon public lands on what their holdings are. If that uncertainty would be removed—as President Wilson said, if the door can be unlocked and if regulation can be provided that will prevent monopoly—I think the securities of these companies will sell at a very much higher figure, and the higher figures at which they sell the less the public will have to pay finally for the property represented by those securities.

I am not in favor, in clause 1, of the proviso contained in lines 7 to 14, beginning "that the chief officer of the department under whose supervision such lands may be shall have the right to determine whether or not the lands shall be used for the purpose contemplated in this bill."

I believe that there should be specific statements put in the act to provide for all these contingencies. I do not believe the personal equation of any man on earth, I do not care how big he is, can determine these big questions that must be settled by definiteness and not by uncertainties of the will and pleasure or anybody. For that reason I seriously object to that clause.

Senator NORRIS. What would you put in, if anything, in place of it?

Mr. BRITTON. My judgment would be that the bill ought to specially set forth the form of lease with all the conditions pertaining thereto. I do not believe if public lands are opened for anybody to engage in the hydroelectric business, that they should be permitted even to go to the expense of a preliminary examination if at the will of some subordinate officer they are to be deprived of it subsequently and lose that investment.

Senator NORRIS. Your idea would be, then, as I understand it, that if they comply with whatever stipulations the law provided, they should be allowed to go into the forest reserves?

Mr. BRITTON. Or on public land.

Senator NORRIS. As a matter of right?

Mr. BRITTON. Yes, sir; I do.

Senator WORKS. Mr. Britton, what advantage is there, in your judgment, in disposing of the public land by way of lease rather than conveying the absolute title?

Mr. BRITTON. I was coming to that a little later.

Senator WORKS. Then I do not want to interrupt the course of your remarks. I will withdraw the question.

Mr. BRITTON. In section 2, the clause providing that at no time shall any lessee deliver to any one consumer electric energy in excess of 50 per cent of the total output is an absurd provision.

We are going to be dependent largely on the economical utilization of the undeveloped water power, of our State in particular, and I fancy much more so perhaps in States that have larger volumes of water, in the development of electric chemical processes. It was only a short time ago that an engineer from Norway came in to see me at my office, soliciting from me a price at which we would deliver to him 100,000 or more horsepower, so they could establish in California the manufacture of the nitrates, about which Mr. Pierce can tell you a little later, and I know will, and more fully. At that time we had not developed water-power surplus sufficient to meet with his demands. But there are developments going on now in California at different points, where it will be possible and where the ultimate interest of the consumer, gentlemen, absolutely is that the greater part of the output of a hydro-electric plant shall be consumed by an industry of that character where it uses the power 24 hours a day and 365 days in the year, which will make it possible for that plant to sell the balance of its product—its overhead charges and all charges being met by your one consumer—at a very much less rate than can the power company not having a diversity of business that only gives a very low load factor. We have builded up our enterprise in California from a load factor of practically 12 per cent, which existed when I took charge of the company in 1903, to a load factor of 70 per cent. In other words, our output to-day is being used 70 per cent of the time in each 24 hours, while 12 years ago it was only being used 10 per cent of the time. That has made possible the reduced rates I spoke about, as having been voluntarily made, and encouraged all of these enterprises. This electro-chemical process which is now being so well done in Norway, and so vastly encouraged by it, and Canada, is going to be one of the saviors and the beginning of low rates for hydroelectric power, and will perhaps

turn the curve I spoke of in the beginning forward instead of across the line of steam production.

Senator SMOOT. Is it not true that it is next to impossible to manufacture nitrates profitably from the air with power of less than 100,000?

Mr. BRITTON. I am so told, but I do not know personally.

Senator SMOOT. I know that in Norway the power used greatly exceeds that. I suppose that the companies there, not many of them, consume as high as three or four hundred thousand—the largest one, Mr. Smith?

Mr. SMITH. I don't think it is quite as large as that, generally speaking.

Mr. BRITTON. They are able to give cheap power because they have no aqueducts to build. They find the water on the top of the hill and take advantage of the natural fall. But without that, we have to-day projects in California, undeveloped, where the minimum cost in horsepower will be reached. But in the early days, where the development of hydroelectric power was in real small units of 1000 kilowatts, or 1,200 horsepower, necessarily the cost per unit of output was very much greater than it is to-day; and water powers cost, in those early days, for installation about $300 a horsepower. We developed a plant not very long ago at a cost of $51, but that is where we had the water pens entirely elevated and had a natural flow from a continuous body of water at Nevada City, and we took advantage of that simply by installing a pipe line and power house at a cost of only $51 per horsepower. The cost will probably run anywhere between that price, under that condition, up to $150 or $200 per horsepower, even now, with the greater development that has been made.

I think there will be a great error perpetrated in this bill if such an inhibition on any power company is imposed so that it can not sell more than 50 per cent of its output to any one consumer, because it might want to sell 75 or 90, and it is in the interest of the consuming public, which is mostly interested—the vast majority of them.

Section 3 I do not know that I quite understand. It seems vague and rather uncertain to me, reading it as a layman. It provides that-

> In case of the development, generation, transmission, and use of power or energy under such a lease in a Territory, or in two or more States, the regulation and control of service and of charges for service to consumers of the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior, or committed to such body as may be provided by Federal statute: *Provided* -

And then it goes on making a proviso that the physical combination of plants, or lines for the generation, etc. I do not know whether that proviso could be taken to refer back only to those lines located in two or more States and under Federal regulation, or whether the proviso can be read out of that principal section to refer to any plants. If it refers to any plants I want to make particular objection to that from economic reasons.

In California we buy from the Great Western Power Co., the Northern California Power Co., the Snow Mountain Water & Power Co., the Sierra & San Francisco Power Co. When the Great Western Power Co. started its plant at Big Bend, on the Feather River,

it would not have paid them to build their transmission line down to the bay and supplied these small towns, because the load factor was too low. I told you a moment ago it was practically about 15 per cent for ordinary lighting. That is in excess of the very great majority. Eight per cent is nearer, probably, to what it is. So the plant was built with the thought they would sell the power in the Sacramento Valley for irrigation and pumping purposes.

The troublesome times of 1907 had just occurred and we had difficulty getting money. Our load was growing and increasing and we either had to build more power houses or had to get power from some other source. They had developed 40,000 kilowatts, although somewhere in the proceedings before the House committee I notice it is stated to be 80,000. But it was only 40,000 kilowatts and we bought 20,000 kilowatts on a 70 per cent load factor, which gave them an opportunity to go into undeveloped fields and sell power at very cheap rates, and which they did subsequently. We brought from the Great Western Power Co. and delivered in the city of Oakland.

The Northern California Power Co. developed a very large amount of power north of Chico. It had developed the business of the smelters, but by a judgment of the Federal courts the smelters were compelled to shut down; and it lost a large percentage of its load. We are obtaining from them power to the extent of 10,000 horsepower. They now, by reason of the cessation of that industry up there, have a great surplus of horsepower and they can not economically deliver the power to any place where they could get business, because the costs of transmission to them would be too high in competition with these companies already engaged in that field.

A power company was developed on the Eel River, known as the Snow Mountain Water & Power Co., which proposed to develop the field for supplying cities we had not reached—such cities as Cloverdale and Healdsburg—and it had a surplus of power, and we purchased it as an economical measure to save us the expense of building more plants. The prices which we pay these two power companies are and is justifiable under the conditions of generation of power and the actual cost to build plants.

The Sierra & San Francisco Power Co. had a plant on Calaveras River, and we bought the surplus from it for a long period of time. Now they have a contract with the United Railroads, with whom we had a contract and which lapsed. And we took this surplus power which they could not dispose of for the same reason as the Northern California Power Co., because they could not economically get into the market. We are still interconnected with that system.

Now, all of those plants to-day, which I have mentioned to you, are connected with our system. We do not know, as a matter of fact, nor can any man tell us, that the current generated by the Sierra & San Francisco Power Co. is supplied to Chico 400 miles away, or whether the Great Western Power Co.'s juice, as we call it, generated at Big Bend, is supplied to San Francisco or to Stockton. The systems are interlocked; the plants are all tied together. And it is an economic proposition to have them tied together—best from an operating standpoint and best from the standpoint of protection of the public.

If the Sierra & San Francisco Power Co. consumers had been dependent upon its lines at all times, there would have been times when

the entire street-car system of San Francisco, that great, big city, would have to stop. If it had not been for the interconnection between the Sierra & San Francisco Power Co. and our company there are times when the Great Western Power Co. could not supply some of its consumers unless we were tied in.

Now, there is no reason why they should not be tied together, especially under State regulation, because the commission regulates the undertaking and looks into the question of the prices to be charged and the improvement of the service; and I can not imagine what was in the mind of the man who suggested the possibility that in any State, in any place where hydroelectric plants are being operated, they should not be absolutely tied in one with the other for the protection of the service and the protection of the public.

Senator NORRIS. This section permits that with the consent of the Secretary of the Interior.

Mr. BRITTON. Again I have that same reason there. I do not believe a matter of that kind should be left to the discretion of any man.

Senator NORRIS. In your State it is left to the discretion of the commission, is it not? You could not do those things without their consent, could you?

Mr. BRITTON. I think there is no prohibition as to that.

Senator NORRIS. Would not that come in under the general power of regulation?

Mr. BRITTON. I presume it would; yes, sir.

Senator NORRIS. So that you really have that kind of a provision, only it is a board that has control of it in California?

Mr. BRITTON. It is not an individual; it is a board. It is a divided responsibility, not concentrated.

Senator WORKS. And it is a board near by, too?

Mr. BRITTON. And it is a board near by and knows the conditions.

Section 5 provided for the taking over of the properties which may be dependent in whole or in part for their usefulness upon the continuance of the lease therein provided. There will be no part or parcel of the entire $60,000,000 of holdings of the Pacific Gas & Electric Co. that would not be dependent in whole and in part upon each other.

Referring to this interlocking as to power plants (leaving out the question of interlocking of other plants operating in the same territory), we have 10 power plants located over our entire system, no one of which, by itself, could supply our system. Nor could any one supply any one particular section of our system. Our distribution systems are all tied in and it is not a separable condition; that is, there is no part of our system that could be separated if, for instance, the Government elected to take over and separate us from this Lake Spalding development. This would also involve the separation of that water now being used for irrigation purposes. It would involve the separation of that big power plant in its ultimate development of 200,000 horsepower from the rest of our system. If it took out the mere power plant it would deprive our houses of light and energy. If it took out our transmission line across the public lands it would kill that section, because it is vital. Every part of our hydroelectric enterprise, every drop of water in the reservoir to the lamp of the

consumer in the house is vital for the continuity of the whole; and if the means for distribution are disconnected, it means absolute death to that corporation and can not be done. It is impossible. And therefore I take it that this question of the taking over by the Government of all the properties dependent in whole or in part for their usefulness on the continuance of the lease provided in the bill means all of the properties.

Now, I can not conceive (and that will be told you by men more able to speak of it than I) that the Federal Government ever would want to enter into the question of handling a $60,000,000 or, as it would be at that time, probably, a $200,000,000 corporation supplying light, heat, and power to the people of an independent State. Then if it takes it over, it takes it over what for? For the purpose of giving to somebody else, putting it up to the highest bidder, selling it for a price and making a profit—and what does it mean? If you take it over there is no provision in this bill that I can read into it by which anybody is certain that if it does take it over that at the end of the 50 years without leasing, upon what conditions and terms it should be taken over and continued.

Senator WORKS. Nor for how long?

Mr. BRITTON. Nor for how long. It does seem to me that there should be no question that the rights to be granted over public lands of the United States of America should be rights guaranteed in absolute perpetuity, subject to such laws and regulations as will enforce the proper conduct of that company; and if not taken care of by the commission of the States that then the United States has a right to interfere.

Of course, I am in favor strongly, gentlemen, as a personal proposition of a corporation of our character having the right to condemn the lands of the United States for this purpose, the same as it can condemn State lands in California for that purpose, but agrees to see that if it was condemned the value of that land, even at the condemnation value, should not be taken into consideration in the fixing of rates.

We think more of the question of our absolute tenure of the land in the service of the public than we do of the question of taking the value of the land into account at all as a means of return to be obtained from the consumer. And all this talk about the consumer ultimately paying for all this, and overcapitalization, at a tremendous figure, as Mr. Finney spoke of, concerning the Great Western Power Co. need not be considered. I read you Mr. Eshelman's statement in which he says that they do not take into consideration for one moment any question of capitalization. A company can capitalize itself for $15,000,000 and not have more than $5,000 worth of property. They take the actual value to estimate the return in every case. So that this question of the capitalization of land value, to me, seems perfectly immaterial, and I should like to see a law enacted by the United States by which we would have the right of occupancy of your public lands.

Gentlemen, I know from my experience in the handling of corporations, representing one that itself has an investment of approximately $110,000,000, what it costs to comply with conditions of this kind. I know that to build up an organization to take care of the conditions attendant upon this bill would paralyze any industry that

has to stand under the burden of the expense. Why burden the people of a State with a tax or the imposition of a tax upon something that belongs to them? If you make any power company pay a price, no matter what it may be, for the occupancy of public land, the ultimate consumer must of necessity pay for it.

Senator WORKS. Mr. Britton, if you were required by the Government to pay a yearly rental, that would be part of your operating expenses, and not part of your capitalization.

Mr. BRITTON. No, sir; it would be part of our operating expenses.

Senator WORKS. I was going to say that would be taken into account in fixing your rates as a yearly charge.

Mr. BRITTON. Yes, sir.

Senator WORKS. That would be the legal aspect of it; at least the consumer would be liable to that additional sum.

Mr. BRITTON. I want to call attention to what appears to be an error in the bill, as I understand it. In section 5 it provides that upon the disposition of the plant, if such a thing can be foreseen, the reasonable value of all property taken over, including structures and fixtures acquired, shall be determined by proceedings instituted in the United States district court for that purpose. It says, prior to that, that it will take over, and that it shall pay, before taking possession, first, the actual costs of rights of way, water rights, lands, and interests therein purchased and used by the lessee, but it does not provide in that particular case, as I read it, that that question of the costs of rights of way, water rights, and lands will be determined by any adjudication, but for all other property they will pay the reasonable value, and if there is a dispute as to that it will be subject to the adjudication of the court. I think there should be something specified in this act with respect to all the property involved, with the exception of the value of public lands taken over by the right of eminent domain or by gift, if you please, by act of Congress. I believe there should be a determination of what is the value. I do not think the act should leave it in the uncertain condition that it does. It should determine what value. "Fair value of the property" would to me, with knowledge of what the fair value means in dealing with properties of this kind, be satisfactory.

Senator NORRIS. You would eliminate the first part of that?

Mr. BRITTON. I would leave it all so that the court would have a right to fix it.

Senator NORRIS. Would not it all be included in what is termed there in the section as "second," reasonable value of all property?

Mr. BRITTON. Strike out the word "others."

Senator NORRIS. Yes; and then strike out the designation here in the bill as first, the actual costs of rights of way, and let it be the "value of rights of way."

Mr. BRITTON. Yes, sir; that is what I mean to include it all in the "reasonable value, or fair value."

Senator NORRIS. I think I get your idea.

Mr. BRITTON. The lawyers may disagree with me on the law. I can not discuss it from a legal standpoint.

Senator NORRIS. There might be a great difference between what is stated in the bill as "actual costs of rights of way, water rights, lands, and interests therein" and "reasonable value," especially after the lapse of 50 years.

Mr. BRITTON. I do believe, as I stated, and I think I might emphasize it by repeating it, that the only procedure should be that the original lessee of the property should take advantage of the notification by the Government that it has that right to take it over; that there should be a determination and contained in the lease in that respect as to what the Government or to what the successor in interest of the original lessee should have to pay for the property which it should continue to occupy.

Senator NORRIS. I want to ask a question on that very language there. I presume the draftsmen of this bill perhaps had an idea that the value would be a good deal more than the first cost, and I would like to know, from your experience as a water-power man, what you think about that idea? Would it be increased in value, as a general rule, above the first costs?

Mr. BRITTON. Just what do you refer to?

Senator NORRIS. I refer to what is mentioned in the bill—the actual costs of rights of way, water rights, lands, and interests therein.

Mr. BRITTON. I think there would certainly be an increase in value in those properties.

Senator NORRIS. Then if that were stricken out and they were required to pay the reasonable value, the probabilities are that they would have to pay more than they would under the provisions of this bill as it now stands?

Mr. BRITTON. They probably would; yes, sir. When hydroelectric energy was first introduced it was possible to obtain private rights of way over private lands for transmission lines and other privileges at a very minimum cost, because people were anxious to get the power; they were anxious to encourage the enterprise. To-day, in the State of California, there is an opposition to lines going through private property, and upon condemnation proceedings we have had to pay a very large amount for some rights of way. We are making the contention before the railroad commission in the trial of our cases that we are entitled to have regarded as the value of our present rights of way the value that they possess to-day, that we would have to pay for them to-day if we had to go out and buy them.

Senator NORRIS. I would like to ask you there, as a matter of information, as to your transmission lines, on which you carry your power from one place to another. Do you run them along the roads or streets, etc? Is that sort of a right of way expensive?

Mr. BRITTON. Private rights of way are very expensive. It is inadvisable, with the present-day development of the science and the very high voltages carried, to run transmission lines over public roads.

Senator NORRIS. As a matter of fact, now in California, in the actual operations, you do not run them along public roads?

Mr. BRITTON. In very, very few instances. Our new transmission lines are all on private rights of way.

Senator NORRIS. And do you buy under condemnation proceedings?

Mr. BRITTON. We buy by negotiation with the owner, if possible, and if not, we bring a suit in court to acquire a right of way.

Senator NORRIS. To such property as you acquire by condemnation do you get possession of a certain strip of land, like a railroad would?

Mr. BRITTON. Yes, sir.

Senator NORRIS. Or do you only get a right to put up your poles?

Mr. BRITTON. We get a right for all our structures and the rights of ingress and egress.

Senator NORRIS. Do you fence them?

Mr. BRITTON. No, sir; we do not fence them. Some are cultivated and used for orchards and otherwise, excepting as the structures take up the space.

Senator NORRIS. Under your law, do you get such a title that you would have the right to fence this right of way if you wanted to?

Mr. BRITTON. I do not know about that. I would rather the attorneys would answer that question.

Senator WORKS. Mr. Britton, I would like to ask you if you can tell, from the provisions of this act, what the United States should do and is obligated to do with this property in case it should decide to take it over. I see that by section 6 the Government is authorized, if it desires to do so, to rerent it or re-lease it to someone else, and then right at the close of section 7 it is provided that if the Government takes it over or re-leases it to somebody else the Government or the new lessee shall assume and fulfill all contracts entered into by the first lessee. I am unable to see in there any other obligations imposed upon the Government or upon a new lessee in that respect, except to fulfill the express contracts made by the first lessee.

Mr. BRITTON. That is all I can read in the bill, Senator.

Senator WORKS. There are a great many complications arising between a utility corporation that do not arise out of an express contract, and there seems to be no provision to meet it at all.

Senator NORRIS. If they take a lease, would they not consequently and necessarily be under the control the same as the first lessee?

Senator WORKS. That depends altogether on the terms of the second lease, but I am talking about the Government, the duties and obligations of the Government, which ought to be fixed by the law itself, it seems to me, if it takes it over. The Government could not contract with itself.

Senator NORRIS. I would like to ask you right there, on this same section Senator Works is inquiring about. It occurs to me, in the last clause of section 7, that the second lessee shall assume and fulfill all such contracts entered into by the first lessee, might be productive of some difficulty by the first lessee, after he knew that he was going to be unable to re-lease at the expiration of his term—entering into a lot of foolish contracts that would embarrass the next man if he had to carry them out.

Mr. BRITTON. That would not be possible in the commission-regulated State.

Senator WORKS. A utility corporation would not do anything of that kind anyway, would it?

Mr. BRITTON. No; I assume that they would not, but if they wanted to they could not in the commission-regulated State.

Senator WORKS. Could they do it under the contract with their consumers?

Mr. BRITTON. Under the laws of the State of California, and under the rules of the commission, we are now compelled to file schedules of rates which we will charge for service—for the various

kinds of service. Those are then approved by the commission, and you can not make a contract with any one at other than the rates according to the schedules filed with the commission unless approved by the commission.

Senator WORKS. That relates merely to the matter of rates, does it not?

Mr. BRITTON. Yes, sir.

Senator WORKS. But does the commission determine whether you shall make contracts, and what the length of the contract shall be, or its terms, other than to determine the rates?

Mr. BRITTON. No, sir; it does not.

Senator NORRIS. Also, they simply determine the maximum rates. In other words, a corporation having three years to operate under this bill, knowing that at the end of the three years somebody else was going to have the operation of the plant, and the Government would not lease to him again; suppose he leased or contracted to furnish electric energy for the next 10 years at a rate that was not remunerative, would your commission object to that?

Mr. BRITTON. Very decidedly.

Senator NORRIS. Would they inquire into it, in the first place, to see whether they had made that rate too low or too high?

Mr. BRITTON. There was a matter came up just on that point in connection with the Diamond Match Co., operating in the town of Barber, in Butte County. We had a contract made in competition with the Northern California Power Co. five years ago, in which we gave them a rate of a half cent per kilowatt-hour. The contract was made at that time for the purpose of building up our load so that we could give a rate more cheaply to the public. The contract expired and the Diamond Match Co. called on the Northern California Power Co. and ourselves for rates, and we competed. We made a rate of sixty-five one-hundredths of a cent per kilowatt-hour for that power on a new five-year contract, coupled with the right to use their steam plant, which they had installed, in case of an emergency or breakdown in our lines or our own system in the immediate vicinity. They had a small steam plant of about 2,000 horsepower, but large enough to take care of some of the most urgent requirements in the municipalities about there. The commision to whom we submitted the contract, as we were compelled to do for approval before it would become effective, decided that the rate quoted by us was less than the rate or cost to use at our substations and would not allow the contract unless we would agree not to charge the other consumers in our district with the losses incurred by that contract, or the difference between the cost price determined by them and the contract price. So they do take cognizance of those things, and if a man were foolish enough to place that sort of an encumbrance upon a power plant regulated by that commission, the commission would very readily take care of that situation. Nobody would take a contract under those conditions, when they knew that it would not be approved by the commission, and if they were not legal the Government or whoever took this over would not be bound by those contracts which were illegal.

Senator WORKS. The commission does undertake to determine whether a rate is too low as well as to determine whether it is too

high, does it not, when it is to the interest of the whole mass of consumers?

Mr. BRITTON. Yes, sir; it does fix the maximum and minimum rates. They do not allow you to deviate from those rates, either maximum or minimum. You must abide by the rates they make for you, and file schedules. If you choose to file schedules away below the cost to you, I assume they would make the same decision as they made in the Diamond Match case.

Senator WORKS. In that case your rates would have to be uniform?

Mr. BRITTON. Yes, sir; that is in accordance with the California law—that there must be no discrimination.

Section 9 I have nothing to say about; nor section 10.

I have overlooked, apparently, the section which provides that no sale of the power shall be made to a distributing company without the permission of the Secretary of the Interior.

Senator CLARK. That is section 4.

Mr. BRITTON. Oh, yes.

That I do not understand the reason for any more than I understood the reason for the prohibition against the physical connection of plants or the 50 per cent. As a matter of fact, we sell energy for light, heat, and power purposes to any number of distributing companies that we do not own or control in California, some of quite large size, supplying light, heat, and power to a very large expanse of country. We sell that under a kilowatt-hour basis, delivered at their substations on a flat-rate basis. They are existing contracts made a great many years ago. I can not see the reason for the prohibition in the law, though I see clearly that no company of our size desires to acquire the distribution companies if somebody else in the city or community will build a distribution system and operate it, because there is little or no money to any power company operating in this State in general distribution for lighting. That is, I mean, the ordinary distribution in small cities.

Senator NORRIS. I suppose the object of that is to prevent putting into the machinery here an extra corporation that would have to be oiled and paid for out of the proceeds of the business; in other words, that one corporation would be organized to manufacture electricity, and then sell that to another company, and that company would sell it to another one, perhaps, and eventually it would get to the consumer; the object being that, whether good or bad. It seems to me there is some merit in that.

Senator WORKS. You mean to say that it is intended to eliminate the middle corporation?

Senator NORRIS. Yes, sir; it is intended to eliminate the middle corporation.

Mr. BRITTON. Again, in a commission-regulated State I do not see that there could be any abuse along that line.

Senator NORRIS. It would at least cost something if you permitted that kind of a corporation to exist between the consumer and the generating company.

Senator ROBINSON. What are the advantages to the public of permitting the producing company to sell to the distributing companies?

Mr. BRITTON. I do not understand that.

Senator ROBINSON. Are there any advantages to the public of permitting the producing company to sell its power to the distributing company?

Mr. BRITTON. No; there is no particular advantage or disadvantage that I can see, excepting that there may be means of obtaining money for the needs of a distributing system by certain people that would not be obtainable by others.

Senator SMOOT. Mr. Britton, there is an advantage, I believe, in this, that the operation of a plant in large units, can always be made at a less cost per unit than in small units. Now, you can take a plant with large units and they can dispose of power to a distributing plant at a very much less cost than it would be possible for them to create power in small units for a distribution plant.

Mr. BRITTON. Oh, absolutely so, taking that view of it.

Senator SMOOT. And there is another advantage, I think, in this, that in many small towns they have a steam plant, and perhaps the towns themselves own the distributing plant and the power plant too. I know of a number of cases where small towns, when the larger plant has put their line through the city, have purchased the power from the large operating plant and discontinued their steam plant altogether and saved a good deal of money by it.

Senator NORRIS. That would be permitted under this act. The Secretary of the Interior undoubtedly would not object to that. I think we ought to bear in mind all the time the object that we want to accomplish.

Senator SMOOT. It can be with the written consent of the Secretary of the Interior, but that is limited also by the words "Except in case of an emergency, and then only for a period not exceeding 30 days." I think that the limitation is wrong. I think that the right should be granted to a power company to sell to a distributing company, such as I have called your attention to.

Senator NORRIS. Senator, you have put the wrong construction on that language. It says that except on the written consent of the Secretary of the Interior no sale or delivery of power shall be made to a distributing company, except in case of an emergency. You can make it in case of an emergency without consent, but not for a longer time than 30 days. But with his consent you can make it for 30 days or longer.

Senator ROBINSON. It is an exception upon an exception.

Senator NORRIS. It is unlimited when you get his consent.

Senator ROBINSON. In case of an emergency, for a period of 30 days, you would not have to have the consent of the Secretary of the Interior, and that would be exactly right.

Senator SMOOT. You would have to have his consent then.

Senator WORKS. In other words, for a permanent supply, you have got to have the consent of the Secretary.

Senator NORRIS. That is it.

Senator ROBINSON. It would resolve itself into the question Mr. Britton suggested at the beginning, as to whether that discretion should be vested in an executive officer.

Mr. BRITTON. No, no, Senator; I called to your attention, as I think it must be apparent to you, that in the State of California

where they are operating under a commission, that the commission would force us to supply energy to a distributing company.

Senator SMOOT. If he did not consent to it you would go to two jails.

Senator ROBINSON. You would be in trouble, sure enough.

Senator WORKS. It would involve a conflict of authority, at least.

Mr. BRITTON. Gentlemen, I have finished my statement.

Senator ROBINSON. Mr. Chairman, it is now 4 o'clock; we have been in session for four hours, and I move we adjourn to 10 o'clock in the morning.

(Whereupon, at 4 o'clock p. m., the committee adjourned to 10 o'clock a. m. Saturday, December 12, 1914.)

WATER-POWER BILL.

SATURDAY, DECEMBER 12, 1914.

COMMITTEE ON PUBLIC LANDS,
UNITED STATES SENATE,
Washington, D. C.

The committee met at 10 o'clock a. m.

Present: Senators Myers (chairman), Thomas, Robinson, Smoot, Clark, Works, Norris, and Sterling.

STATEMENT OF MR. W. A. BRACKENRIDGE, VICE PRESIDENT AND GENERAL MANAGER SOUTHERN CALIFORNIA EDISON CO.

Mr. BRACKENRIDGE. Mr. Chairman and gentlemen of the committee, I represent the Southern California Edison Co. as its vice president and general manager, and in the comments which I shall have to make on the bill which you now have before you governing the occupancy of lands for the development of water power, I will voice the sentiment of a very large number of people in southern California, particularly those who are engaged in manufacturing and agricultural industries, who desire to have the benefit of water powers in California for the conduct of these industries.

The Southern California Edison Co. is an operating electric company, with generating plants and distributing systems covering a very large portion of southern California. The generating plants consist of several steam plants and water-power plants, all of which water-power plants are partly or wholly within the forest reserves.

These plants are devoted to the furnishing of electricity for light and power in the city of Los Angeles, also in some 30 towns and cities in southern California. In addition to this, a large portion of the power is used for lighting and manufacturing purposes throughout the territory embraced in the company's operations.

The company has found it necessary to build a new steam plant to augment the power in excess of that which could be developed by water power, and this became necessary for the reason that the streams during certain times of the year did not furnish sufficient energy to supply the demand, and we have been somewhat hampered, as I will point out later, in proceeding with the development of water power. In consequence steam power has been resorted to, and we now have one steam plant of 47,000 kilowatts, and another of about 12,000-kilowatt capacity, and have found it necessary to rent a third steam plant in the city of Los Angeles, in order to maintain our load and provide for energy.

Senator WORKS. Mr. Brackenridge, before you leave the subject, what active competitors have you in the field which you cover?

Mr. BRACKENRIDGE. I was coming to that.

Senator WORKS. Then do not let me interrupt the course of your statement.

Mr. BRACKENRIDGE. I will take that up in due course. Covering a large portion of the same territory, there are operating in southern California, in competition with the Southern California Edison Co., the Pacific Light & Power Corporation, the Southern Sierras Power Co., and, in the city of Los Angeles, the Los Angeles Gas & Electric Co. These three companies are operating in certain parts of the territory occupied by the Southern California Edison Co.

Senator WORKS. And it is expected that the city of Los Angeles will soon become a competitor, is it not?

Mr. BRACKENRIDGE. Yes; the city of Los Angeles is now building, and has nearly completed, an aqueduct some 240 miles in length, and has partially constructed a water-power plant for the development of approximately 30,000 kilowatts. It is proposed to bring this power to the city of Los Angeles for distribution and use it in lighting the city and also furnishing power for industrial purposes. When this plant shall have been completed and its distributing system acquired or constructed we will have a fourth competitor.

Senator WORKS. Are all of the companies you have mentioned operating in the city of Los Angeles, or only a part of them?

Mr. BRACKENRIDGE. Only the Pacific Light & Power Corporation and the Los Angeles Gas & Electric Co. and ourselves. The Southern Sierras Power Co. operates in the neighborhood of San Bernardino, and is also, as I understand, building a transmission line to the Imperial Valley, which when completed will be the longest transmission line in the United States.

Senator NORRIS. For what distance will they transmit energy?

Mr. BRACKENRIDGE. They will, when the line is completed, transmit it some 600 miles, I am informed.

Senator NORRIS. How much of a loss will there be entailed in the transmission of power that distance?

Mr. BRACKENRIDGE. I could not express any opinion on that subject, because it depends on how much power they send over the line, the size of the copper, and a great many other conditions.

Senator NORRIS. I suppose they will have the most modern and the best equipment. In that case, what percentage would be the loss?

Mr. BRACKENRIDGE. I do not know, because I do not know what the size of the copper is, nor the voltage, and I do not know how much power will pass over the line. If they pass 7,000 kilowatts over the line, with a certain size of copper, the loss will be one thing, and if they send 20,000 kilowatts over the line, the loss will be another thing.

Does that answer your question, Senator?

Senator NORRIS. No, it does not answer it.

Senator SMOOT. I take it you can not answer it.

Mr. BRACKENRIDGE. The question can not be answered unless all the conditions surrounding the transmission are given.

Senator NORRIS. I suppose that the company, of course, would have the most economical equipment for its purposes. I asked the ques-

tion simply to find out how far they were able to carry electric energy now as a practicable proposition.

Mr. BRACKENRIDGE. It may be true they have the most modern equipment; it is possible, nevertheless, there may be a wide variation in the loss. The question can not be answered unless all of the conditions of operation are known.

Senator NORRIS. I only wanted your opinion.

Senator SMOOT. Express your opinion as to what the loss will be under the very best conditions.

Senator CLARK. Not as to their equipment, but the very best equipment.

Mr. BRACKENRIDGE. I should think the loss in power might be 25 per cent.

Senator SMOOT. That is as near, I believe, as you can come to answering the question.

Mr. BRACKENRIDGE. The operations of all the companies at the present time are under the control of a railroad commission, which has been in force for some three years or more. The commission has very broad and comprehensive powers. They have the power to regulate rates, not merely the maximum rate, but they have absolute power to regulate both maximum and minimum rates which shall be charged for power and light, or for any other purpose.

The CHAIRMAN. They have the right to fix a definite rate?

Mr. BRACKENRIDGE. They have the power to fix a definite rate. And their powers also cover the issuance of stock, the prices at which it can be sold, the issuance of bonds, and the price at which they can be sold, and have control of all conditions governing the physical properties, every expense, expenditures in new construction, generating plants, transmission lines, and everything that is connected with the conduct of the company's business.

Senator NORRIS. Are those about all of the powers you can confer in connection with the regulation of the transportation of electricity?

Mr. BRACKENRIDGE. I think they have them all.

Senator NORRIS. I would like to ask you as to your judgment as a business man, particularly in this business, what you think of the powers thus delegated to this commission? Has it been wisely administered, and is it a system of control which gives efficiency to the generation and distribution of electrical energy? Has it been satisfactory?

Mr. BRACKENRIDGE. In general, I think it has been satisfactory so far as our company is concerned.

Senator NORRIS. Is there any dissatisfaction on the part of the companies?

Mr. BRACKENRIDGE. Not that I am aware of.

Senator NORRIS. The public-utilities corporations are not complaining in California that they are not sufficiently regulated, are they?

Mr. BRACKENRIDGE. I have not heard it.

Senator SMOOT. Do they promulgate regulations requiring you to keep up your appliances and equipment for handling the business?

Mr. BRACKENRIDGE. Yes, sir; and not only that, but they have the power to require us to extend into new territory in supplying power.

Senator NORRIS. I presume they have power to require you to develop, for instance, any water-power proposition you own.

Mr. BRACKENRIDGE. If it were in a forest reserve?

Senator NORRIS. No; anywhere in California over which they have jurisdiction. They probably would not compel you to develop something on Government land.

Mr. BRACKENRIDGE. I would not like to answer that question positively, but I presume that their powers would extend to compelling us to develop a station if there was a public necessity.

Senator NORRIS. I am asking that question, based on the assumption that there was a public necessity which would require it.

Mr. BRACKENRIDGE. I think they have that power.

Senator WORKS. It is a matter that would necessarily follow the right to compel you to extend your service.

Mr. BRACKENRIDGE. In further answer to your question as to whether the commission has been satisfactory, at the time the question was voted upon—that is, the question of the powers of the railroad commission—the only powers which were not left in the commission were those of regulating rates within the bounds of a municipality, and that power was left with the governing body of the city, the trustees, or the council, or whatever political body that power was vested in. And we were therefore in the position of having our rates regulated outside of the municipalities by the railroad commission and inside of the municipalities by the political body in which was vested that authority.

Senator WORKS. And the fixing of rates by local bodies was never satisfactory, was it?

Mr. BRACKENRIDGE. It was entirely unsatisfactory, because while they theoretically had the power to regulate the rates, if the regulation was not satisfactory to the people of that town the city then voted on the rate which should be charged.

Senator NORRIS. Has that been changed?

Mr. BRACKENRIDGE. Recently, in the last November election, that question was voted upon, and the vote was carried, placing the power of regulating rates within municipalities in the hands of the railroad commission, so that they now have control of the rates throughout the State, regardless of whether they are within or without municipal bounds.

Senator NORRIS. Is this an appointed commission?

Mr. BRACKENRIDGE. It is appointed by the governor.

Senator NORRIS. How many are there on the board?

Mr. BRACKENRIDGE. There are five.

Senator NORRIS. Appointed for specific terms?

Mr. BRACKENRIDGE. Yes.

Senator NORRIS. What is their term of office?

Mr. BRITTON. If you will pardon me, when they were appointed by the governor, they were appointed for two, four, and six years, so that one drops out every two years.

Senator WORKS. Those were merely the first members, and after that it is a six-year term?

Mr. BRITTON. Yes, sir.

Senator SMOOT. How long has this law been in operation, creating this commission?

Senator WORKS. About three years.

Mr. BRITTON. The amendment was adopted October, 1911, and the act went into effect March 20, 1912.

Senator SMOOT. Suppose you had a commission appointed that might make up their minds that they were going to make the rate so low that it would destroy your property; have you a right to appeal to the courts?

Mr. BRACKENRIDGE. I believe not.

Senator NORRIS. Oh, yes; you must have.

Senator ROBINSON. Oh, yes; you can not take away that by any legislation. You can not deprive a man of the right of appeal against having his property taken away from him by any legislation, either congressional or State.

Mr. BRITTON. The law provides that as to findings of facts the commission's decision shall be final, and that there shall be no appeal from that.

Senator ROBINSON. That would make no difference.

Senator CLARK. That same thing is true of all final appeals.

Senator WORKS. You may bring a suit regardless of that provision. There is no question about that.

Senator ROBINSON. You can not take away a man's property by charging less rates than are remunerative.

Senator SMOOT. That is true.

Mr. BRACKENRIDGE. I thought your question was whether the decisions of the commission could be appealed from. They can not.

Senator WORKS. You are right about your answer. There is no direct appeal from it, but nevertheless it is not conclusive.

Mr. BRACKENRIDGE. I am not a lawyer, and could not answer on that point.

With reference to the question of competition versus monopoly, which has been much discussed, it appears to be the opinion of the California railroad commission, so far as we are able to judge, to discourage competition and substitute therefor regulated monopoly, and I believe that by that process you will reap benefits which are not possible under competitive conditions, and I think that theory has been well established. Personally I feel that it is better for both the company and for the consumer that so far as possible competition shall be eliminated, and there are many reasons for this. For instance, it seems to be obvious that where we have a case such as I cited in California where we have four competing companies, there must be the expense of four administrations, to say nothing of the great duplication of power stations, etc.

Senator STERLING. Is it not a question, after all, as to under which system the consumer will be most benefited?

Mr. BRACKENRIDGE. Yes, sir.

Senator STERLING. Is it demonstrated, do you think, that with a monopoly the consumer will be benefited as much as where there is competition?

Mr. BRACKENRIDGE. I think so, most decidedly.

Senator CLARK. Over the regulated monopoly?

Mr. BRACKENRIDGE. Yes. It can not be otherwise, for the reason that the consumer pays for it in the end, on any theory of regulation which can be possibly devised. The consumer is the one who has to pay for unnecessary extravagance.

Senator WORKS. In Los Angeles you have two telephone companies, for example, have you not?

Mr. BRACKENRIDGE. Yes, sir.

Senator WORKS. Has that ever proved to be a benefit to the users of telephones in the city?

Mr. BRACKENRIDGE. No, sir; on the contrary, it is proving a very great nuisance.

Senator WORKS. It is generally regarded as very detrimental, is it not?

Mr. BRACKENRIDGE. Yes, sir. I have never heard anyone using the two telephones who did not advocate the merging into one system.

Senator NORRIS. Now, on that point, is it not true that telephone rates are less in Los Angeles than in many eastern cities?

Senator WORKS. No; I think not, Senator Norris. They are regulated there, just the same as the other things.

Senator NORRIS. I agree with you fully, Senator, that two telephone systems are an awful nuisance, but I saw a statement sometime ago giving a list of cities where there were two and where there was one, and I think Los Angeles was one of the latter; and, as I remember it, the rates charged to the consumer for the use of the telephone was a good deal less than we have, for instance, in Washington.

Senator WORKS. That is the result of the regulation of rates. The rates are fixed by the commission.

Senator SMOOT. Our experience is this: We had two telephones, and the price dropped, I think, about 50 cents a month, or something like that, but everybody was compelled to have two telephones.

Senator NORRIS. That is the objection to it.

Senator WORKS. They have to have two telephones instead of one.

Senator SMOOT. We were sensible enough to dispose of one of them, and we now have only one system.

Senator ROBINSON. The principle that applies to telephones would not necessarily apply to light and heat.

Senator WORKS. Oh, no. I was only illustrating the inconvenience of that sort of a principle.

Senator SMOOT. What he had reference to was that the same transmission lines could carry the power of all of them, rather than have four transmission lines.

Senator WORKS. In other words, that the consumer ought not to pay for a duplication of plant.

Mr. BRACKENRIDGE. It has not only the four transmission lines, but there is a duplication of the whole distributing system.

Senator WORKS. And overhead expenses.

Mr. BRACKENRIDGE. Where the companies are in active competition, even through the State, towns, and cities, there would be three or four lines instead of one. Some one must pay for those poles, under our system of regulation of rates, which is based on the value of the property devoted to public service. The company is not the loser by it, but the consumer is the one who must, in his rate, pay to that extent, for an unnecessary duplication, and that is the theory on which the benefits of monopoly, as against competition, is based.

Senator STERLING. I may be mistaken; but if I remember correctly, Mr. Britton stated yesterday that the effect of competition was to reduce the price to the consumer in one or two instances.

Mr. BRITTON. If the committee will pardon me right here, I would like the privilege to set myself right on that statement. My associate told me last night that I had evidently misled the committee in the statement I had made. I did make the statement that when competition ensued in the three small towns which were invaded by the Great Western Power Co., prices were reduced, and, in some cases, almost half, and that they remained there under regulation. I intended to say that the prices in other cities of the same character, and other places, were reduced also by the voluntary action of our company. It was not done by order of the commission, but by the voluntary act of our company.

Senator WORKS. Well, in any event, the corporations supplying power, whether it be one corporation or two corporations or a dozen, is entitled, under the law of California, to a reasonable return on the investment after paying operating expenses, depreciation, etc.

Mr. BRITTON. The commission has allowed 8 per cent.

Senator WORKS. Yes, and if you have two of them you have got to pay that interest on twice the investment, if the plants are duplicated.

Mr. BRITTON. That is true, on the basis of the valuation of this property involved, which has not been diminished by competition, but remains there to serve the consumers.

Senator WORKS. Whether the individual consumer is required to pay more money or not, the community bears the budren of supporting two companies instead of one.

Mr. BRITTON. That is true; yes, sir.

Senator NORRIS. Does this commission have control over the telephone system in California?

Mr. BRACKENRIDGE. All public utilities.

Before this digression I was saying something on the physical property of the Southern California Edison Co., in order that you might have clearly before you the conditions now existing and the necessity or desirability of proceeding further with the water-power development which the company has now under consideration.

The generating stations, as now constructed and in operation, consist of a chain of water powers in the Sierra Mountains, and steam plants which I have already mentioned, making a total capacity of approximately 120,000 horsepower, of which, I should say, nearly 100,000 horsepower is developed by water. And when I say that proportion I mean that represents the amount of machinery installed.

Of course, there are periods when the streams run very low and the amount of water power which can be derived from that source is very much less, and it has to be supplemented by steam power.

The water powers now in operation on the streams known as Santa Anna River, Mill Creek, Lytle Creek, and the Kern River, are operating under a special act of Congress of March 1, 1906, and are for a term of 40 years, subject to such regulations as the Secretary of Agriculture may impose, but the term is a fixed term—40 years.

Senator SMOOT. May I ask you whether you have a scale of charges with you?

Mr. BRACKENRIDGE. Yes, sir.

Senator SMOOT. Could you put that in at this point?

Mr. BRACKENRIDGE. Yes.

(The schedule referred to is as follows:)

Ten cents per horsepower per annum for first year, increasing 10 cents per year to tenth year and continuing at $1 per year thereafter to expiration of lease, with certain deductions as specified in The Use Book, 1911.

Mr. BRACKENRIDGE. Although the plants are operating under this special act of Congress, the act is not specific as to just what the time shall be, and those terms are fixed by the Secretary, and they are, for the first year, 10 cents per horsepower per annum, increasing by increments of 10 cents a year until the tenth year, when it becomes a dollar and continues at that rate for the remainder of the time. That, however, is modified by certain exceptions. The Secretary has the authority to, and in fact does, make very material reductions in those charges in accordance with the rules laid down, which provide that the charges shall be proportionate to the amount of lands occupied by these works within the forest reserves.

Senator SMOOT. Does he charge you on the peak load?

Mr. BRACKENRIDGE. No; the charges are based on the flow of the stream, and there is also taken into consideration the amount of machinery which they have installed.

Senator SMOOT. Then the horsepower is computed from the amount of the flow, rather than from the amount of energy generated?

Mr. BRACKENRIDGE. Yes, sir; from the amount of the flow, and I think properly so, because the territory might be occupied and a very small amount of power developed, and the theory is that if we are going to use this land we must use the power which is available at that site.

Senator WORKS. Does it occur that the competing companies have their sites on the same stream that you have, in any case?

Mr. BRACKENRIDGE. In the case of the Kern River, the Pacific Light & Power Co. has one plant on that river.

Senator WORKS. Are you above or below them?

Mr. BRACKENRIDGE. The operating station which we now have is below them.

And in that connection I was going to continue to say that in addition to these operating plants we have on the Kern River four undeveloped water powers which are now under the present regulation of the Secretary of Agriculture, and we have had them under these conditions for something like a year and a half, and are proceeding actively with the construction of one of those developments. That is what is known as progressive development; that is to say, we are required to build one of those plants within a specified time. Within another specified time we are required to commence work on the next one and complete it within a given time, and so on, until all of the chain of water powers is developed; but it is my understanding that so long as we develop one in good faith, or two, our failure to develop the other does not constitute a forfeiture of the one which we are constructing.

Senator WORKS. Have you estimated anything about what amount of power you can develop on the Kern River, for example, with the water rights you have?

Mr. BRACKENRIDGE. Yes; we can develop something over 100,000 horsepower.

Senator WORKS. On that one stream?

Mr. BRACKENRIDGE. On that one stream. And the plant which we are now developing is a plant for the development of 30,000 kilowatts, and when completed, and with the transmission line ready for distribution to the consumers, will cost $6,000,000.

Senator WORKS. You carry all of your power from that stream south, do you not? No proportion of it goes north?

Mr. BRACKENRIDGE. It all goes down to the city of Los Angeles and is distributed from there.

Senator SMOOT. What is your highest water head?

Mr. BRACKENRIDGE. The one which we are operating is 875 feet. The one which we are constructing is 785 feet.

Senator SMOOT. That is a splendid fall.

Senator NORRIS. Is it the intention, with this increase of power that you will have with these plants when completed, to extend your operations into other fields or to discontinue some of the steam plants, for instance?

Mr. BRACKENRIDGE. It is to provide for the rapidly increasing business. Our business increases at the rate of 15 or 16 per cent per annum, and we have over three and one-half years from this date in which to complete this plant which we are now working on. So that, if we proceed with the work, we expect by the time this plant is completed that our demands for power will have so increased that we will absorb all of the output that will be produced by this station. And you must bear in mind that while we are making estimates of 40,000 horsepower there are times when the flow of the stream is so low that we will not get anything like half of that.

Senator NORRIS. Then you will have to increase your steam power also?

Mr. BRACKENRIDGE. The probability is we will have to put in something in the way of steam.

Senator NORRIS. In that connection I would like to have you give us the benefit of your knowledge and experience in regard to the comparative cost of electricity by steam and by water power.

Mr. BRACKENRIDGE. That is a very difficult question to answer, Senator. It is one that I would be very glad to answer for myself, but I could not do it definitely. It is quite impossible to segregate the two, because they are all interconnected—the steam plants and water plants.

Senator NORRIS. It would seem to me, from the fact that you are maintaining these water powers and also extending your activities in water-power development, that it must be the judgment of your company that there is economy in that character of development, or you would not do it.

Mr. BRACKENRIDGE. It is my judgment that there is economy in it at the present time.

Senator NORRIS. It is economical then, comparatively speaking, to generate power on a stream that varies so that you have to supplement it with steam at different times of the year?

Mr. BRACKENRIDGE. Yes; there is some economy, but the two are coming very close together; there is not even now very much difference, and there is a conflict of opinion in our own organization as to whether water power or steam is cheaper. But it is my opinion, and it may have some influence in inducing them to go ahead with these plants.

Senator SMOOT. What kind of engines are you using in developing electricity by steam?

Mr. BRACKENRIDGE. All of our engines now are of the turbine type. In the new station which we have just built, which is a very modern station on the ocean front, we have one generating turbine of 12,000 kilowatts, another of 15,000 kilowatts, and the third one of 20,000 kilowatts, and we have provided, in that building, space and foundation for a fourth one which we expect will be not less than 25,000 kilowatts, and probably 30,000 kilowatts.

Senator NORRIS. You use oil for fuel, entirely?

Mr. BRACKENRIDGE. We use oil for fuel.

Senator WORKS. Have you any storage reservoirs in connection with your plant on any of those streams?

Mr. BRACKENRIDGE. None whatever.

Senator WORKS. Could the flow be regulated and increased during the dry season for reservoirs for the store of water?

Mr. BRACKENRIDGE. It could be; yes, sir.

Senator WORKS. Is it possible and practicable?

Mr. BRACKENRIDGE. I think on the Kern River that would be possible, but it has been claimed by the irrigators below that it would interfere with the continuity of the flow, because they have their own reservoir in the valley below, and they prefer to use that for the reasons which they give, namely, that if they take the flood waters down during the winter and store the water below, where it can be drawn without traveling over many miles of dry river bed, subject to seepage and evaporation, etc. In other words, they have it right at hand, where they can use it, and I understand that in this reservoir below they impound substantially all of the flood waters of the stream, so that none of it goes to waste.

Senator WORKS. There are no storage reservoirs above you?

Mr. BRACKENRIDGE. No, there are no storage reservoirs on the river at all. The water which passes through the wheels flows down the river for the benefit of the irrigators below, and we are not permitted to waste any of the water. In other words, we are required to let it pass whether we require it for power or not; it must pass continuously and uninterruptedly to the farmers.

Senator WORKS. That is one of the largest streams of southern California, is it not?

Mr. BRACKENRIDGE. It is one of the largest; yes, sir.

Senator WORKS. And supplies a good many acres of land with water for irrigation?

Mr. BRACKENRIDGE. Yes, sir; that irrigates a good many thousand acres of land below.

Senator NORRIS. I would like to ask you if you are able to give the figures, in regard to a comparison between oil as a fuel, as you use it, and anthracite coal, let us say, as $4 a ton. Can you give the comparative cost in electric energy?

What do they pay here for coal?

Senator SMOOT. I do not know of any one using anthracite coal for the development of steam. Bituminous coal is always used for the development of steam. I could tell you what it cost out in our country.

Senator NORRIS. I would like to compare it with Washington.

Dr. Smith, can you give me the price of coal that is paid by the Government or other parties here in Washington and what kind of coal is used in the production of electricity?

Dr. SMITH. I could not tell you, for the production of electricity. Of course they use bituminous coal.

Senator NORRIS. You do not know what that costs per ton?

Dr. SMITH. No; I could not tell you.

Senator SMOOT. I could tell you what it is out our way.

Senator NORRIS. I know what it is out where I live, too; but I would like to know what it costs here.

Well, Mr. Brackenridge, can you give us this information, comparing the cost of electricity produced by steam, using oil for fuel, at the price you have to pay for it there, where you use oil with coal—bituminous coal?

Mr. BRACKENRIDGE. I could not, because I had had no experience there at all in the use of coal—none whatever. We have used oil exclusively. In fact we have no coal.

Senator NORRIS. I understand that thoroughly, but I thought maybe you had made some investigation?

Mr. BRACKENRIDGE. I have had no occasion to make an investigation into that, for that reason.

Senator NORRIS. Can you give us any information in regard to the amount of oil that you use there in the production of energy per horsepower, for instance.

Mr. BRACKENRIDGE. I can give it to you in other terms. Of course that is a varying quantity also.

Senator NORRIS. Of course I know that is not very definite.

Mr. BRACKENRIDGE. I do not want to give you an evasive answer, Senator.

Senator NORRIS. I realize that my question can not be answered definitely without taking other things into consideration, but take anything into consideration you want to, but give us the advantage of knowing what you do take into consideration.

Mr. BRACKENRIDGE. With some of our most efficient machinery we have gotten as high as 285 to 290 kilowatt hours out of a barrel of oil. That is running at the highest stage of efficiency, in these great big machines that we run, with full load and with high efficiency. In that way we get more economy.

Senator NORRIS. That is what I want. I want you to get it at the greatest efficiency and utmost economy and under the most advantageous circumstances.

Mr. BRACKENRIDGE. Under ideal conditions we can get about that economy from our oil, but it runs down very much less than that, of course, where the conditions are not so favorable.

Senator NORRIS. It will not average that, will it?

Mr. BRACKENRIDGE. No, sir; nothing like it.

Senator NORRIS. Do you know what it will average?

Mr. BRACKENRIDGE. No; I do not.

Senator SMOOT. What does your oil cost you per barrel?

Mr. BRACKENRIDGE. We are paying now about 65 cents per barrel in very large quantities.

Proceeding with the description of these water powers on the Kern River and their uses in connection with the question which has been

asked regarding irrigation: On this particular stream it is not possible to divert water to the disadvantage of any of those desiring to use the water for irrigation purposes, so that the entire volume of the stream is carried for the benefit of the irrigators below; and, in addition to that, a very large part of our load is represented by current used for pumping for irrigation, and the people below, therefore, benefit not only by the regulated flow of the stream but they also have the benefit of very cheap power for pumping for irrigation purposes. In other words, there are many of these wells that are quite shallow, and, strange and inconsistent as it might seem, we can pump more water than we take to generate the power that is used in pumping.

Senator NORRIS. That occurs in a shallow well, pumped by electricity generated from a large head?

Mr. BRACKENRIDGE. Exactly. You know, we have to use the water under 875 feet head, and perhaps we pump it under a head of only 50 or 100 feet. So that instead of detracting from the amount of water that is available for irrigation we, as a matter of fact, multiply it several times.

Senator WORKS. You are required, I suppose, to turn back into the stream below all of the water that you take out above?

Mr. BRACKENRIDGE. Yes.

Senator WORKS. And at a point above where it is desired for use by irrigators who have water rights on the stream?

Mr. BRACKENRIDGE. It happens in this case, Senator, that there is no such condition, because the land between the point of diversion and the point of return of the water is not land that could be farmed.

Senator WORKS. I say you are required to turn it back into the stream at a point above where it is required for use by the irrigators who have water rights on the stream.

Mr. BRACKENRIDGE. Yes.

Senator WORKS. So that practically you are not using the water or consuming it at all; you are simply using it and turning it back into the stream?

Mr. BRACKENRIDGE That is the condition.

Dr. SMITH. Might I interrupt to answer Senator Norris's question? I have looked up some notes that I had taken at one of our engineer's conferences, and taking the testimony of one of the New York engineers, regarding costs at the Edison plant, I believe it was, at New York City, with coal at $3.20 and the consumption of coal 1¼ pounds per kilowatt hour, it figures out that the coal costs there would be 80 cents as compared with your 65 cents oil costs.

I think that is approximately correct.

Senator NORRIS. That is coal at how much a ton?

Dr. SMITH. At $3.20.

Senator NORRIS. All right. I am much obliged to you, Doctor.

Dr. SMITH. Now, in that connection, the improvements in machinery for the generation of electrical energy has been mentioned, and the same engineer has compared that with the years ago. The coal consumption 12 years ago was 3½ pounds as compared with 1¼ now, cutting it in two, you see, in 12 years.

Mr. BRACKENRIDGE. Might I be permitted, Mr. Chairman, to ask a question?

The CHAIRMAN. Certainly.

Mr. BRACKENRIDGE. Do I understand you to say that coal at $3.20 per ton represents oil at about 80 cents?

Dr. SMITH. No; I figured it this way, that if one barrel of oil would give 285 kilowatt hours, which was your statement, then the equivalent in coal would be 498 pounds at the New York station—the equivalent consumption of coal.

Senator SMOOT. Mr. Brackenridge is right in his statement. He said that coal at $3.20 a ton is equivalent to oil at 80 cents, and they buy it at 65.

Dr. SMITH. That is right.

Mr. BRACKENRIDGE. Let me ask what is the maximum charge for lighting services in New York under the Edison Co.'s system?

Dr. SMITH. The maximum is 10 cents.

Mr. BRACKENRIDGE. I will say that in Los Angeles the maximum price for lighting is 5.5 cents and runs down to about 2.5 cents. In outside districts, outside of Los Angeles and Pasadena, our maximum price is 7 cents.

Senator NORRIS. I wish we had your commission in the District of Columbia to regulate it here.

Mr. BRACKENRIDGE. We have never had a rate regulated by a commission, Senator; it has been an entirely voluntary reduction from the beginning. I make one exception; I want to except the city of Los Angeles, where we are regulated by the council. But in the outside territory the reductions have been voluntary.

Senator NORRIS. You are not regulated now by the council as I understand you?

Mr. BRACKENRIDGE. That was only just voted on. It was only yesterday that I got the result of the vote which carried that measure.

Senator SMOOT. What is the lowest price your company charges for power?

Mr. BRACKENRIDGE. I think that probably the lowest price for pumping is about 1¼ cents. That is about the minimum price for power in those quantities. We have contracted with the railway to furnish power at a somewhat lower price, but it is on the basis of taking a given amount of power. That is to say, we sell them a block of power, and they can use any amount they please up to that amount, and as a matter of fact on the railway system they can not use it all, so that the price which they actually pay is more than appears, because they can not use it continuously.

Senator SMOOT. Do you limit them to the use of it in certain hours of the day, or can they use it whenever they please?

Mr. BRACKENRIDGE. They are free to use it whenever they please. There are, of course, times when the load is very heavy and there are times when it is exceedingly light.

Continuing the subject of these water powers on the Kern River, we have an advantage in the plants which we are now operating, as I said before, in having a fixed term of lease—40 years. The reason there has not been more progress made on the development of the powers which we now hold under a permit has been the uncertainty of our ability to occupy the land for any definite specified period. We do not object so much to either the theory of the charge or the practical method of determining that charge as to its amount, if a charge is to be made at all, but we feel, in California, that those water powers should be just as free to the people of California as

the air that they breathe, and that there should be no charge whatever. That is our position, except that possibly some nominal charge sufficient to cover expenses that the Government might be put to by reason of the occupancy of the land might be made, but nothing more.

That is our attitude on the question of a charge.

The CHAIRMAN. Mr. Brackenridge, I would like to ask this question of you: I presume that the reason that those who are now in the business of developing electrical power opposed to this bill in its present form is that they think that it would hamper them in future operations in extending their works and putting in new plants, etc., on the rivers and on the public lands.

Would they rather put in new plants under the present law, which really authorizes a revokable permit at the pleasure of the Secretary of the Interior, than to go in under this new law, which proposes a definite terms of years and can not be revoked, except for good cause, shown in court?

Mr. BRACKENRIDGE. Mr. Chairman, I am not at all sure we will be able to proceed with the work which we are now doing, although we have spent a quarter of a million dollars already on this $6,000,000 project. I am not at all certain that we will be able to proceed with it under the existing conditions.

The CHAIRMAN. As they are now?

Mr. BRACKENRIDGE. As they are now. But I can tell you that we will not proceed with any of them under the conditions proposed by this measure.

The CHAIRMAN. Do you consider the present conditions preferable and superior to those under this measure?

Mr. BRACKENRIDGE. Yes; I do.

The CHAIRMAN. Do you not consider the present conditions very unsatisfactory in many respects?

Mr. BRACKENRIDGE. They are unsatisfactory, but I would not give up an unsatisfactory situation for one that was still more unsatisfactory.

Senator STERLING. Wherein do you regard it as more unsatisfactory?

The CHAIRMAN. That is what I would like to know; wherein you consider it more unsatisfactory, and why.

Mr. BRACKENRIDGE. I regard it as more unsatisfactory because——

Senator STERLING (interposing). You would have a longer term and an irrevocable lease under this bill.

Senator SMOOT. He ought to have said "regulations," rather than "law."

Senator WORKS. That will lead you, I suppose, into a consideration of the bill, and you might as well take it up in its entirety.

Mr. BRACKENRIDGE. Mr. Chairman, I had not intended to take up a discussion of the bill at this time, but I would be quite glad to do so. Your question leads me to a consideration of the bill now.

Senator NORRIS. Mr. Chairman, I would like to suggest that the gentleman be allowed to pursue his own course.

The CHAIRMAN. Oh, yes; I do not want to interfere with the regular order of your remarks.

Mr. BRACKENRIDGE. I will answer the question in a very few words, and take this example.

The CHAIRMAN. Mr. Brackenridge, just go ahead in your own way and use your own time as you see fit.

Mr. BRACKENRIDGE. For instance, there is no need, that I know of, of the provision in this law limiting the sale of power to any one concern to 50 per cent of the output generated. That in itself is enough to deter us from undertaking to operate under this bill.

The CHAIRMAN. I think that ought to be amended.

Mr. BRACKENRIDGE. Oh, yes; that ought to be amended.

The CHAIRMAN. You are taking the bill, of course, as it is?

Mr. BRACKENRIDGE. I am only answering your question by citing that one provision, without going into a full discussion of the bill. I simply cite that one provision in order to answer your question briefly.

The difficulties we have encountered in operating under the present regulations are not caused by any charge made by the department; they are caused by the maze of uncertainty with which the whole thing is surrounded, and I think that it is quite appropriate that I should bring to your attention the conditions surrounding the plant which we are now constructing in order that you may have proper illustration of how these conditions operate against the progress of work of this kind.

This permit was taken out sometime ago and work was commenced on the plant sometime prior to the time specified in the permit for the commencement of work, and we endeavored to proceed energetically with the prosecution of the work, but we were much hampered by reason of our inability to secure the money to push the work with the diligence that would satisfy the authorities that we were going to complete it within the time stipulated in the permit. And it goes without saying that our position was a hazardous one for the reason that if we did not complete the work within the time stipulated in the permit, although we might have spent five or six million dollars up to a given time and the works were not in operation, we were in the risk of being thrown out of the property altogether.

It therefore became necessary to have some assurance that the funds would be available to carry the work forward with suffcient energy to insure its completion at the stipulated time beyond any question. Several means were considered by which we could provide sufficient money to carry this work along year by year at a rate which would satisfy the authorities that it would be completed at that time. As this money was not available from earnings, it was necessary to resort to some other means of financing. Several plans were considered. We are permitted, as I assume most operating companies of the country are, under trust deeds to draw down bonds only to the extent of a certain proportion of the amount of money to be spent for new construction. In other words, we have to furnish 25 per cent from earnings in order to have available money from the proceeds of the sale of bond and the earnings must bear a certain relation to fixed charges before we can issue bonds. It was therefore impracticable to proceed with this work with money derived from the sale of bonds, and we therefore considered the question of selling the company's common stock, and made application to the railway commission for permission to sell our common stock, which was given: but conditions have not been favorable this year for selling either bonds or stocks. We made a great effort to finance this project

in some other way, and we met constantly the objection of bankers to investing anything in a project that was surrounded with the uncertainties that prevail under the conditions of the now existing permit.

Senator NORRIS. Is not that remedied in this bill? That objection is met, is it not, in this bill which we have before us now?

Mr. BRACKENRIDGE. No; I think not. It is not met, for the reason that the bill states for a period not longer than 50 years. If you change the bill to read, "For a period not less than 50 years," then make——

Senator NORRIS (interposing). When you get your lease, though, under that provision it would be for a definite term.

Mr. BRACKENRIDGE. When we got the lease, but we do not know what the lease would be.

The CHAIRMAN. What would you say if it was just 50 years, no more, no less.

Mr. BRACKENRIDGE. Judge Short draws attention to the fact that the act under which we are operating now provided for 99 years, and we got 40.

Senator NORRIS. But the 40-year term was definite when you did get it?

Mr. BRACKENRIDGE. When we got it.

Senator NORRIS. So what you did get would be definite in the lease.

Mr. BRACKENRIDGE. No; we have to take what we get.

The CHAIRMAN. What would you say of "50 years," not more nor less, in this bill?

Mr. BRACKENRIDGE. We would be satisfied with 50 years if 50 years was a fixed time, but after following that the condition of recapture is so definite there is no telling what they are going to take. That would be unsatisfactory to us.

Senator NORRIS. Suppose we made it 50 years and somebody wanted to have a lease for 25 years; he would be compelled to take it for 50 years. There might be some enterprise where you are going to develop water power for some specific purpose that was known in advance would not be wanted for more than 25 years; for instance, in a mine, or something of that kind.

Senator WORKS. You could leave that to the option of the lessee, giving him the option of 50 years or less.

Senator NORRIS. I do not see the force of the gentleman's objection when the lease itself would be definite. I suppose the Secretary, under this law, would make the lease 50 years, but when it is made it will be stated in terms in the lease, 25, 30, 40, 50, or whatever it is. It can not be more than 50, but it will be definite.

Mr. BRACKENRIDGE. All I can say is we would not want it unless it was at least 50 years. The Secretary may think he will do one thing to-day, but he may do another thing to-morrow.

Senator NORRIS. But at least when he does do it, it is then ended and he can not change it afterwards.

Mr. BRACKENRIDGE. I do not know that even by the terms of this bill he can not change it.

Senator NORRIS. The only way he could change it would be for a violation of the provisions of the lease, then he would have to go into court to have it canceled.

Mr. BRACKENRIDGE. However, we feel that if you are going to have measure at all which becomes law it should be so definite in its terms at there is no question as to what it means, and we will never t any assurance sufficient to convince capital to go into these develments unless we have it in such definite terms that there can be no stion, and I think that "for a period of not longer than 50 years" ans that at the discretion of the Secretary he may make it three ars or five years or two years.

The CHAIRMAN. What would you think of putting in a minimum not less than 25 and a maximum of not more than 50 years?

Mr. BRACKENRIDGE. If you said not less than 25 nor more than 50, we could be sure that we could have 25 years and possibly 50?

The CHAIRMAN. Yes; that is it.

Mr. BRACKENRIDGE. That is objectionable.

Senator WORKS. You might provide in the bill that the lease ould be for 50 years, unless the person applying for it desires a ter term.

The CHAIRMAN. That would be all right, would it not, Mr. Brackridge? There would be no objection to that would there?

Mr. BRACKENRIDGE. I beg pardon, I did not understand that.

The CHAIRMAN. Senator Works suggested it would be for 50 years ess the party applying wanted it for a shorter time.

Mr. BRACKENRIDGE. That would be very satisfactory and would tter than I suggested.

The Edison Co. is not in the position of a company promoting enterprise. It is a company operating, as I have already exned, and acquires these water powers one by one to supply the and for increased power, and we have hoped that we will be to hold this chain of water powers to be developed to meet the irements of increasing business, and it is with that in view that obtained this permit, which is called a progressive permit. We that we will be able to proceed with the development of the which we are now working on, and if we are permitted to do that r some security the others will surely follow.

Senator WORKS. What is the estimated cost of this new develop which you now have under way?

Mr. BRACKENRIDGE. $6,000,000, of which we have already spent t a quarter of a million, and the permit has only been in force a short period.

Senator WORKS. In general terms, how much has the company inl in the development that has already been made and is in al use?

Mr. BRACKENRIDGE. How much has it spent on its several water-r stations?

Senator WORKS. Yes.

Mr. BRACKENRIDGE. I could not answer that question, Senator. not remember.

Senator WORKS. Could you approximate it?

Mr. BRACKENRIDGE. The largest station which we have on the . River cost about $3,000,000, or a little over $3,000,000, and one which we are developing, including transmission to the point distribution, will cost, as I have already said, about $6,000,000.

Senator STERLING. How many have you, Mr. Brackenridge?

Mr. BRACKENRIDGE. Outside of this one we are working on we have three.

Senator STERLING. I mean already developed.

Mr. BRACKENRIDGE. Already developed we have six, but they are small. The whole output from those stations is not more than we propose to put in this one which we are now working on.

Senator NORRIS. Under what law, Mr. Brackenridge, have you obtained this permit for these three additional power plants on the Kern River; under the law of 1901, is it?

Mr. BRACKENRIDGE. Under the law of 1901.

Senator NORRIS. Under that law your permits are revocable at any time, are they not?

Mr. BRACKENRIDGE. No. Oh, under this?

Senator NORRIS. Yes.

Mr. BRACKENRIDGE. Well, I suppose it is. They are all revocable for cause.

Senator NORRIS. Does not the law specifically give the Secretary of the Interior authority to revoke it at any time he pleases?

Mr. BRACKENRIDGE. No; it does not.

Senator NORRIS. I think it states so specifically. That has been one of the objections to the law, that there is no definite period.

Mr. BRACKENRIDGE. Do you mean that he can revoke it at any time if we comply with all of the conditions of the permit?

Senator NORRIS. He does not have to go into court to revoke it, as I understand it.

Senator WORKS. But do you think he could exercise an arbitrary discretion in that matter?

Senator NORRIS. I must say yes. I think the law specifically gives him that discretion.

Senator SMOOT. It is a revocable permit.

Senator WORKS. I have no doubt about that at all, but the courts would hardly permit the Secretary of the Interior to revoke a permit and destroy the property without reason or without cause.

Senator NORRIS. What I called Mr. Brackenridge's attention to is that this law in that respect is better than the existing law, because the permit is irrevocable except for breach of conditions or violation of the law. That is one of the great objections to the existing law which has been offered, for instance, by ex-Secretary Fisher in the hearings on this particular bill before the House committee. He was Secretary of the Interior for a while and had the administration of the law under his supervision, and he found that that was one of the serious objections to the law—men were unable to finance their propositions because of the uncertainty of the tenure of the lessee.

Mr. BRACKENRIDGE. That is what we wish to remedy if we get a new law, and we ought to remedy that.

Senator NORRIS. That is the point. This particular bill we have before us attempts to remedy that by this 50-year provision.

Mr. BRACKENRIDGE. If that is amended as Senator Works has suggested my objection to that particular paragraph would not obtain.

Senator NORRIS. That is in the bill as it passed the House.

Senator WORKS. Not a definite, fixed term of years.

The CHAIRMAN. Mr. Brackenridge said that if it were made for 50 years unless the party applying wishes a less term he would have no objection to it.

Senator NORRIS. There is no dispute about this. The law does provide, when the lease is made, for a specific term. If this law goes into effect as it stands now and the Secretary executed a lease under it it would be for a specific term, and definite, stated in the lease.

Mr. BRACKENRIDGE. I know it would, but you do not know now in advance, in discussing this bill, whether he is going to give 10 years or 5 years or 50 years.

Senator NORRIS. No.

Senator ROBINSON. When you make your loans in order to secure funds for a development, have you already made leases, or do you get your loans after you secure the lease?

Mr. BRACKENRIDGE. No; we would have to get the lease before we could borrow the money.

Senator ROBINSON. Then at the time of making the application for the loan you would know for what length of time you had secured the lease?

Mr. BRACKENRIDGE. Yes; but it would not do us any good if the Secretary said it would be 5 years or 10 years.

Senator NORRIS. At least, there would be nobody hurt?

Senator ROBINSON. Under the present law he can make it any period he wants to, from 1 year up to 99 years.

Mr. BRACKENRIDGE. Not on the operating ones, but on those we propose to develop.

Senator ROBINSON. Of course, that is what we are talking about. Under the present law authorizing him to make leases he can make them for any period up to 99 years that he wants to.

Mr. BRACKENRIDGE. Yes.

Senator ROBINSON. Do you know of any case where he has made it for 2 or 3 or 5 years, or tried to?

Mr. BRACKENRIDGE. I do not know of any, but the fact that I do not know of any does not mean that there is no case of that kind, because I have not followed that closely.

Senator ROBINSON. I understand that. I am asking for your knowledge of the matter. What is the lowest term of lease that you know of as having been given under this law giving the Secretary discretion as to the length of the lease?

Mr. BRACKENRIDGE. I am not familiar at all with leases granted to other parties. I am interested only in our own properties.

Senator ROBINSON. I am not asking you what you are interested in: I am asking you about your knowledge of the thing.

Mr. BRACKENRIDGE. I have none.

Senator ROBINSON. You said that one of your prime objections to this bill is that it does not fix a specific term of lease and gives the Secretary power to make a lease for two or three or five years, as reflecting upon the probability that any propositions would be developed under this law. I am asking you if he is now making leases of that sort under the present law, which vests him with discretion as to the term?

Mr. BRACKENRIDGE. My answer is that I have no knowledge outside of our own operations.

Senator SMOOT. I will say to the Senator that they are not leases, but they are permits given for 40 years, and that is revocable at any time. Mr. Finney calls my attention to it now, and the permit that is given is for 40 years, and there is a provision in it that it is revocable any time.

Senator NORRIS. I do not believe that under that law he could make a lease that would take that power away.

Senator SMOOT. It is not a lease, it is a permit.

Senator NORRIS. Correctly speaking, it is a permit and not a lease.

Senator ROBINSON. Awhile ago you were asked by one of the members of the committee why the proposed measure was more satisfactory to you than the present law permitting leases, or permits, as the Senator calls them, and you stated that one of the reasons was the provision in this bill which forbids the selling of more than 50 per cent of the power to any one concern.

Has not the Secretary under the present law the power to put that stipulation into a lease, and as a matter of fact has he not put it in some leases?

Mr. BRACKENRIDGE. I think he might put it in, but he did not in our case put it in. But I question very much, having operated under a permit the terms of which are not specific in that respect, whether he could impose such a hardship upon any operating company, particularly as the railroad commission of California controls the entire situation with respect to what we shall do and where we shall go and how we shall sell, and to whom we shall sell.

Senator ROBINSON. As a matter of fact, under the act of February 15, 1901, the Secretary of the Interior did, in the permit or lease to the International Power Manufacturing Co., of Spokane, Wash., put that very provision in the lease.

Mr. BRACKENRIDGE. We can not help what he did in Spokane, Wash.

Senator ROBINSON. But you do not seem to catch the force of my question. You stated that the proposed law was more objectionable to you than the existing law, or more unsatisfactory, was the term that you used, for the reason that the law contains this provision. I am calling your attention to the fact that in the present law the Secretary has the power, and, in fact, does exercise it, to put that provision in the permit or lease.

Senator WORKS. Mr. Brackenridge, any provision of that kind in this law would be in direct conflict with the law as it exists in California in the matter of control and use of power, would it not?

Senator ROBINSON. If you will pardon me just one further question, I am not seeking to justify the provision, but it was based upon your explanation of your opposition to the bill that I was asking you that question.

Senator SMOOT. Perhaps he did not know of that permit. He knew this, however, that in his permit that was not included.

Senator ROBINSON. Whether he knew that the Secretary had that power was the question I was asking him.

Senator WORKS. Any provision of that kind in this law would be in direct conflict with the laws of California controlling the use of power and controlling the distribution of it and extension of your

lines, and that sort of thing, if it were enacted into law, would it not?

Mr. BRACKENRIDGE. Yes, sir; that is what I tried to make clear in my reply.

The CHAIRMAN. Is there anything else, Mr. Brackenridge?

Mr. BRACKENRIDGE. Yes, sir; a great deal.

The CHAIRMAN. All right; go ahead.

Mr. BRACKENRIDGE. On the question of monopoly, which I will revert to for a few moments, because it has been made the subject of a great deal of discussion, I have already stated that in my opinion the railroad commission discourages disastrous and ruinous competition in favor of a well-regulated monopoly. There was presented the other day a diagram, connecting one company with another, through its directors, and evidently the endeavor was to show that many of these power companies were creating a gigantic monopoly to the disadvantage of the consumer, and I confess that I have not studied the diagram very closely, and if I had I do not think that I could understand it. But I can see its purpose, and I want to say a few words in that connection.

The Southern California Edison Co. has no affiliation with any other company in California or anywhere else that I know of in its electrical operations, with the possible exception, if this exception may be considered as forming any undesirable connection with another company, that it owns a small company in Santa Barbara, where it supplies electricity for both light and power. Except for that connection, in the electrical business I know of no connection whatever with any other corporation engaged in the same business, nor, so far as I know, have any of our officers any connection with any other corporation engaged in the same business.

Senator CLARK. You say your company owns that Santa Barbara company?

Mr. BRACKENRIDGE. Yes, sir; we bought it and operate it separately, under a separate name.

Senator SMOOT. But do you know whether any of your directors are directors of any of the other companies?

Mr. BRACKENRIDGE. I do not think they are: I would not say positively, but I would be pretty sure to know it if they were, and I never heard of their being directors of any other company. You mean any other company engaged in the electric business, I presume?

Senator SMOOT. Yes, sir. This diagram purports to show interconnecting directorates.

Mr. BRACKENRIDGE. No, sir; except the company that I spoke of in Santa Barbara which is controlled by our company. Naturally we have some of our directors on that board of directors in the Santa Barbara company, but with that exception we have no such connection.

In my judgment as an engineer and operator, if all these companies in California were connected together, physically and financially, the whole situation would be very much improved and the consumer would be better served as to price, service, and in every other respect. There is no stream in California or any other State whose characteristics are exactly like another one in the topography of the country, the rainfall conditions, and snow in winter, and all of those elements that contribute to variation in the flow of individual

streams. If all the water powers from San Diego on the south to the Canadian border on the north were connected together it would result in better service, better load factor, and resulting lower rates, and would eliminate in a very large degree the necessity for generating steam power at all.

Senator THOMAS. It would also, would it not, insure a double existing capital stock and bond issue of equal proportions?

Mr. BRACKENRIDGE. A double capitalization?

Senator THOMAS. Yes. In other words, when your companies combine, is it not a fact that they almost always issue more capital than they had before and more bonds than they had before?

Mr. BRACKENRIDGE. I do not care if they do, because I am talking——

Senator THOMAS (interposing). That may be; but I am asking you the question. You may not care, but I am asking you——

Mr. BRACKENRIDGE (interposing). I beg your pardon; I did not intend to answer your question impatiently. What I meant by that was that it has no bearing whatever on the man who buys the power.

Senator THOMAS. Would it not have this bearing, that if you increase the capital stock and bond issue your fixed charges would be greater? I mean your charges for current would have to be greater, because your fixed charges would increase in proportion to the bonded issue?

Mr. BRACKENRIDGE. It is quite possible, but the consumer does not bear it.

Senator THOMAS. Who does?

Mr. BRACKENRIDGE. The people who are responsible for connecting these companies together—the promoters.

Senator THOMAS. Of course I may be mistaken, but I am unable to perceive how an increased bond issue and an increased stock issue can earn interest and dividends unless they earn it off of consumption.

Mr. BRACKENRIDGE. I would like very much to enlighten you on that subject, because there is a misconception as to what the consumer is charged, and I am in the business and have been in the business for a long time, and I have had very frequent occasions to confer with the railroad commission, through our officers in Los Angeles, and I know what their practice is, and I know also by study of the general question what the practice is in other States, and the universal practice is to fix a rate at which a public utility may charge its consumer on the basis of the value of the physical property devoted to that purpose, without regard to what the stock or bonds or anything else is valued at. It has no bearing on it whatever, Senator.

Senator THOMAS. Why are they increased?

Mr. BRACKENRIDGE. Why are what increased?

Senator THOMAS. The bonds and stock issues?

Mr. BRACKENRIDGE. The bonds and stocks are sold and the proceeds used to pay for additions to the property and to serve the public.

Senator SMOOT. Senator Thomas's question I do not believe you quite understood. In other words, the Senator asked the question if the combinations of the companies were made, would not they immediately increase their capital stock and bond issue, not for the purpose of increasing their plants, but just simply by way of water, and your answer was, "What if they did?"

Senator THOMAS. In the place of "earnings," "net earning power."

Senator SMOOT. In other words, your answer, I take it, that if the combination was made and immediately they would water their stock, it would make no difference in the charge to the consumer.

Mr. BRACKENRIDGE. I do not see why they would. There is no necessity for it. But it would not follow——

Senator THOMAS (interposing). I concede that there is no necessity for it. I concede that fully; but I can not recall a single combination of any industry in this country made upon the basis of the capital stock of its constituents. They always issue additional capital stock, and very frequently have issued bonds.

Senator WORKS. In your view of it, Senator Thomas, if that should be done, no regulating body certainly would allow rates based upon the watered stock if it did its duty.

Senator THOMAS. No regulating body ought to do it.

Senator WORKS. They do not do it in California.

Mr. BRACKENRIDGE. I would like to answer the Senator's question in this way, that a combination of all of those interests would not necessitate increasing their bonded indebtedness or their stock, and if it did that it would not result to the disadvantage of the man who buys and pays for the service, because those things are not taken into consideration in fixing the rate for such service.

Senator NORRIS. I understood you a moment ago, Mr. Brackenridge, to say that any payment for a lease to the Government would always be shown by an increase in the rate that was charged the consumer. If your theory in answer to Senator Thomas's question is true, why would that make any difference whether you paid a rental to the Government or whether you did not?

Mr. BRACKENRIDGE. For the reason that the return which is allowed by the commission on the basis of valuation of the property takes into consideration the operating costs, and that becomes an operating cost.

Senator NORRIS. Would not the interest on the bonds be part of the operating costs? That is what is involved in Mr. Thomas's question.

Senator ROBINSON. If you will pardon me, in the hearings before the House committee, page 466, that exact question was presented to the California Commission in a telegram by Congressman Kent, and the reply of the commissioner, Mr. Eshelman was:

> Great Western Power Co. applying for bonds alleged as part of evidence of cost that it had paid for Big Meadows lands and rights $1,333,000 in bonds and $2,000,000 in stock. This commission does not look to face value of such stock and bond issues in fixing value of properties, but looks to the properties themselves. The commission certainly will not recognize face value of stock so issued as basis of rate making. We have not at hand the data showing actual cost of these lands at the present time.

And so forth.

Senator SMOOT. They fix the rate based upon the physical valuation of the plant?

Senator ROBINSON. Yes; that is the statement of the chairman of the commission.

Mr. BRACKENRIDGE. Mr. Chairman, I have only 20 minutes before 1 o'clock, and I assume that you will not want to hear me again after that hour, and I would like to proceed briefly and take up this question, and as soon as I have concluded I will submit to questions.

The CHAIRMAN. I will suggest that Mr. Brackenridge be not interrupted any more unless it is a matter of importance.

Mr. BRACKENRIDGE. On this proposition of interlocking directorates, I desire to call attention to page 693 of the hearing upon the water-power bill, No. 14893, because it directly affects the company which I represent. I have not, of course, read all of these statements, but there is such gross inaccuracy in the statement concerning our company, of which I have knowledge, that it naturally leads to the conclusion that such inaccuracies prevail throughout the entire book.

It states, at the bottom of page 693:

> Paul Shoup, president and director of the Pacific Electric Railway Co., a subsidiary of the Southern Pacific Co., largely dominated by H. E. Huntington, who controls the Pacific Light & Power Corporation, was formerly president of the Southern California Edison Co.

I want to say that there is absolutely no foundation for such a statement. Mr. Shoup never had any connection whatever with our company and was not known to me until he came to Los Angeles to take charge of the Pacific Electric Railway system. There is no reason why Mr. Shoup should not be, and we would be very glad if he was, but we have not the honor or privilege of having him with us.

I hope I may be pardoned, on this question, if I try to lay some emphasis on this question of monopoly, so called, and try to make it clear that it is not only desirable from the standpoint of the consumer of current but that the same theory, I believe, has been indorsed by all of the regulating bodies, public service commissions, throughout the country as the modern idea of economical operation. My own opinion is that if it were physically possible and practical so to do, if we had one great power station, centrally located in the United States, with its lines reaching out to every State and city and town in the United States from the Gulf of Mexico to the Canadian border and from the Atlantic to the Pacific Oceans, and under one operation, one administration, and one big organization, that the whole country would be benefited thereby. That is my attitude on the question of monopoly as against vicious and ruinous competition between separate interests serving the same community.

In discussing this bill I would like to give briefly my views regarding provision on line 14. I have already stated that the period should be definite. The suggestion that Senator Works made that it be amended to read for a period of 50 years except in cases where the applicant desires a shorter time would eliminate that objection so far as the time is concerned.

There should be some provision there in the taking over of the property at the end of 50 years that an indeterminate franchise should run after the expiration of the 50-year period to the time when such recapture takes place.

On the same page there have been some comments made on the provision for enabling the applicant for a lease to secure data required in connection therewith, applying to getting information and doing preliminary work in connection with the water-power development. Personally I see no objection to that, because I think it is advantageous to those making the application that they should have some security in their investigations, so that they will not be interfered with by some opposing interest that might interrupt their investigations prior to the time that they secure the final

permit. There are perhaps arguments on the other side, but personally I do not raise any objection to that.

Next, on page 3, beginning at line 8, "and shall provide that the lessee shall at no time contract for the delivery to any one consumer of electrical energy in excess of 50 per cent of the total output."

That, I think, next to the uncertainty of the tenure of occupancy, is the most objectionable clause in the whole bill, for reasons which have been elaborated upon and which it is unnecessary for me to repeat.

I for 14 years was connected with the Niagara Falls Power Co., and for the greater part of that time was engineer in charge of its power plants on the Canadian side and on the American side of the Niagara River. We began preliminary work about 1890. I was in conference with the directors of that company during that time, and with the board of consulting engineers, who were selected as the best men in this country and in Europe to devise plans and make recommendations regarding this great development at Niagara Falls, and the whole enterprise was encouraged by the prospect of selling power to large consumers, and the first industries which came there use from 10,000 to 12,000 horsepower or more. These include Pittsburgh Reduction Co., in the manufacture of aluminum, and the Carbide Co., in the manufacture of carbide for acetylene gas, and many others. The Pittsburgh Reduction Co. is now one of the largest power users in the United States, if not in the world.

The Niagara Falls Power Co. was justified in proceeding with this great development in the prospect of selling to these industries on their own property without necessity for making transmission.

The condition is not dissimilar in California. We expect, if we are allowed to develop these large powers, to find some one industry which would take the entire output from one of our stations, and if it would justify us in going on with these developments under proper regulations.

As to the provision on page 4, "that except upon the written consent of the Secretary of the Interior no sale or delivery of power shall be made to a distributing company," that cuts no figure at all. The Railroad Commission of the State of California will tell us where and when and how we shall sell our power and what we shall get for it. I want to qualify that by saying that I do not know anything about the legal phases of it, not being a lawyer, but if the power conferred upon the railroad commission in the State of California means anything at all it means that it shall have control of just such conditions as are here prohibited.

"* * * no lessee under this act shall create any lien upon any power project operated under a permit issued under this act by mortgage or trust deed, except approved by the Secretary of the Interior.

That is a legal question, but it seems to me it would come under the same condition that I have just mentioned.

Senator WORKS. In California, you mean to say, the commission has the power to determine that very question?

Mr. BRACKENRIDGE. That is my thought.

On page 3 there is the provision governing the recapture of the property at the expiration of the lease, which enumerates certain things which it should take and certain things it should not take. It is my opinion that the entire paragraph should be amended, and that

a provision should be substituted making certain beyond any question that all of the property belonging to the then lessee, whether on Government land or off of Government land, or any way affected by dissemination of the power development shall be purchased, and that the compensation shall be fixed in the manner provided by law at the time of such acquisition, by the law which shall govern the acquisition of property by eminent domain at the time of such acquisition, and shall cover all of the property in any way connected with or affected by the particular plant in question.

Senator WORKS. You mean to say that under this act as it now stands the Government might take over so much of the plant of a company that is located on public lands and leave the balance of it in its own hands, thereby breaking it in two?

Mr. BRACKENRIDGE. They might go even further. It is extremely probable that they might take this part or that part or the other part, depriving the company then in occupation of the generating stations, and would leave it crippled so that it would be unable to fulfill its contracted obligations thereafter.

Senator WORKS. Are any of your power stations partly on private land and partly on Government land?

Mr. BRACKENRIDGE. Yes, sir.

Senator WORKS. On what streams?

Mr. BRACKENRIDGE. The buildings themselves are not.

Senator WORKS. I mean the site that is used for power purposes.

Mr. BRACKENRIDGE. No; they are all in the forest reserves.

Then, on page 6, line 10, regarding making contracts for a period of more than 20 years afterwards; in the case of the Niagara Falls plant, which I have quoted before, leases were made for terms of 99 years, and parties negotiating for such leases were unwilling to take a lease for any less time, and the term was fixed at 99 years for the reason that large investments were necessarily made in the form of great buildings and structures which were practically permanent.

The period should be extended for the reasons given.

The CHAIRMAN. What would you think about making an amendment there to the effect that it would be extended for 20 years unless the party making application desires less time.

Mr. BRACKENRIDGE. I think it ought to be more than 20 years.

The CHAIRMAN. How many?

Mr. BRACKENRIDGE. I should think 99 years.

The CHAIRMAN. Forty-nine years more?

Mr. BRACKENRIDGE. I should think so; yes, sir. If you are going to encourage great industries that are going to make large investments on the strength of that, they would have to have reasonable assurrance that they would get the power for a time that would justify them in going out there and making the investment, or it would not be attractive. I can not see any reason why that should not be given from the standpoint of the Government. I should think it would be advantageous, because if they take it over I assume that the purpose is to take the property over not for the Government's operation but for the operation of the State or some political subdivision of the State, because, as I understand it, the Government has no constitutional right to operate an electric plant and to distribute and sell to individual consumers. That is a legal question that I am

not prepared to pass upon, but I am advised by our attorney that that is the case.

Senator CLARK. May I ask a question as to the financing of these companies? I suppose that where bonds are issued it is the purpose out of these earnings to create a sinking funds that will pay those bonds as they mature. Is that right?

Mr. BRACKENRIDGE. Yes, sir.

Senator CLARK. Then if the indebtedness of the company was such that the bonds matured in 20 years the amount of annual tribute levied on the consumer would be greater than if those bonds ran for 50 years, would it?

Senator NORRIS. It would not make any difference, as I understand this witness's theory, whether the bonds drew 10 per cent interest or ten hundred per cent interest, as the consumer does not pay that; that is not taken into consideration.

Senator CLARK. The consumer may not pay it, but my question is asked for the purpose of securing information. I suppose that the annual sinking fund must be such as to meet the bonds that may become due.

Mr. BRACKENRIDGE. That is the theory of the sinking fund, I believe.

Senator CLARK. It is the theory of a sinking fund, and all these great operating companies have sinking funds, I suppose, for that purpose.

Mr. BRACKENRIDGE. Yes, sir.

Senator CLARK. That is, they provide from year to year for the payment of the bonds and do not postpone providing for the payment until the time when they become due. Now, if the life of the bond were 20 years, it would require a larger annual charge for the sinking fund than if the bond matured at twice that length of time, would it not?

Mr. BRACKENRIDGE. You are quite correct in that.

It is nearly 12 o'clock, Mr. Chairman, and in conclusion I will just say that I have done the best I could to express my views at this time, and it is my conclusion, after reading this bill and hearing the very interesting and intelligent discussion of it on the two sides, that the measure would work a greater hardship upon us in its present form than the permits under which we are now operating.

STATEMENT OF MR. CLARENCE M. CLARK, REPRESENTING E. W. CLARK & CO., BANKERS, PHILADELPHIA, PA.

The CHAIRMAN. Gentlemen, Mr. Clark, a banker of Philadelphia, wishes to be heard briefly this morning; and I suggest that those of us who can remain do so and give him a chance to get his business in the record. So that if there is no objection we will hear Mr. Clark.

Mr. CLARK. I shall not take very much time, Mr. Chairman, unless the members of the committe desire to ask questions. Of course, I should be very glad if you would ask questions and allow me an opportunity to discuss the questions with you; that would suit me better.

The CHAIRMAN. You may take your time, so far is I am concerned.

Mr. CLARK. Mr. Chairman and gentlemen, I represent the banking firm of E. W. Clark & Co., of Philadelphia, who have been interested in the public utility business for about 25 years. I personally have been interested in it for 20 years. I want to present for your consideration a viewpoint on this subject which is hardly covered by the engineering, or technical, or operating presentations of the case.

That is, I want to present the economic and financial side of the question, which to my mind as a banker appears to be of even greater importance than the practical questions which will be presented and have been presented by the men who are building and operating the properties; because while it is always possible to secure men to build and to operate, it is not always possible to secure money to enable them to do so; and unless this bill as passed by Congress is so drawn as to attract capital, it will absolutely defeat its own purpose. That, in other words, is the starting point; you must draft a bill which will tempt the investor to put his money into the enterprises which are based upon this bill.

Therefore the burden of my argument will be, as strongly as I can make it, to induce you to create a constructive piece of legislation under which construction can be carried on and plants operated.

In reading the bill and the testimony which has been presented, I think procedure has been had upon several incorrect premises, which I will enumerate in the following order:

In the first place, that there exists in this country a great Water Power Trust, sometimes called an Electric Trust; the evidence of this is given in the shape of interlocking directorates, and very inaccurate testimony has been submitted before the committees which have considered this question, and in the magazines and other public prints.

And I want to say, gentlemen, that for the 20 years that I have been in this business, and the longer period that my firm has been in it, I have never known of any such Electric Trust or Water Power Trust. I have never heard of this, except as given in these writings of men who claim to have information, and in the testimony which has been submitted before Congress. My firm has been as largely connected, in the 25 years of its experience, with the financing and construction and operation of public-utility companies, including water-power companies, as any single banking house in the United States. There are some perhaps that have done a larger business, but not many.

Senator CLARK. Did you give the name of your banking house?

Mr. CLARK. Yes; E. W. Clark & Co., Philadelphia. We have always been absolutely independent; we have operated on our own lines entirely; we have no connections or affiliations or entanglements in any electrical or water-power trust in any way, shape, or form. My experience and my testimony would be that of the representatives of almost every banking house in the country. And the evidence which has been submitted to demonstrate that such a water-power trust or electric trust exists is absolutely incorrect.

Senator THOMAS. In that statement, do you include the testimony which was incorporated in the report of the Commissioner of Corporations made two or three or four years ago?

Mr. CLARK. Without having that report before me, or being familiar with the statements in it, I presume they are the same as have been made in other publications on that subject; and as I recollect them—I think I read it at the time—I would make that same general denial of them and as positively as I know how to make it.

In other words, the inferences which have been drawn, owing to the fact that one director sits on a dozen boards if he likes, or that I, as a banker in Philadelphia, buy my machinery from the greatest manufacturer of electrical machinery, the General Electric Co., at the lowest price I can force them to sell it at, or any other similar detail of the operating of the public utility companies, does not constitute a proof or a demonstration in any way of the correctness of the statement that there is an interlocking relationship between those corporations, the operation of which is to the detriment of the public.

Senator NORRIS. Do you think that the fact of one man, as you say, sitting on a dozen or fifteen directorates of 12 or 15 corporations, would not be any evidence of the interlocking nature of those corporations?

Mr. CLARK. None whatever.

Senator NORRIS. What kind of evidence would you have to have to prove that condition, in your judgment?

Mr. CLARK. May I enlarge upon my answer to that question just a little?

Senator NORRIS. Yes.

Mr. CLARK. The reason for my making that statement is this: The reason that men are chosen for the directorates in these corporations is because of their knowledge of the business, and their ability to be of service, and their intelligence in that line of business: they are not chosen for the reason which is indicated by those reports, because they can assist in controlling the whole general organization.

Senator NORRIS. That would be one method of performing service for those corporations, however, would it not?

Mr. CLARK. I have not seen any evidence of that. Moreover, when one director sits on a board of 12 or 15 members, he does not control that board; he may represent only a small interest in that company: he may have a small amount of stock.

Senator NORRIS. Or a large amount.

Mr. CLARK. He might have a large amount, of course, and if he had a controlling amount he would control the company.

Senator ROBINSON. Well, as a matter of fact, in many instances directors are chosen because of their relationship to financial concerns: is that not true? You stated a while ago that they were chosen because of their knowledge and skill in the business. Now, instances have been cited in these hearings where mere clerks in the office of certain men of financial prominence have been chosen as directors of those companies; so that it is not always true that those directors are chosen because of their knowledge and skill in the business, but they are chosen in some instances, and, in fact, in many instances, because of their relations to financial institutions.

Mr. CLARK. Because of their ability to assist in financing the enterprise.

Senator WORKS. Senator Robinson, in the case you mention, you should bear in mind that they select persons for dummy directors only until they can select the men whom they want to serve permanently as directors.

Senator ROBINSON. No; the statement was made here yesterday that the stockholders in a very large light and power concern in the West had named as a director a clerk in the office of a firm engaged in financial transactions in New York, on Wall Street, and that that clerk had authority, among other things, to sign transfers of stock, and so on.

Senator WORKS. That was because the law required such a representative for that.

Senator ROBINSON. As a matter of fact, however, I think it has been pretty well established that the practice prevails of selecting men as directors of those companies, in some instances, who have neither skill nor knowledge concerning the subjects with which they deal, but who are in fact the representatives and agents of those who do possess the skill or knowledge and who for one reason or another do not want to put themselves forward by taking positions as directors.

Senator WORKS. That may be so; but I was trying to give the exact facts with reference to the testimony that you were referring to.

Senator CLARK. I suppose there is no question that people who control a large quantity of stock in a concern, whether they have any knowledge of the way the concern ought to be operated physically or not, usually insist upon having their representatives on the board of directors. I know that if I was a large investor in any institution, although I knew nothing about the operations of it, I would want some representation on the board.

Senator ROBINSON. But where you have the knowledge, and where you have the investment, suppose you put in somebody who is in the nature of a dummy as your representative—somebody who has neither knowledge, ability, nor skill, to represent you—of course, I am only taking your illustration and applying it.

Senator CLARK. Well, here is the thing I was speaking of: I may have the wrong idea of it; but suppose I have no knowledge of electrical power or its distribution, or engineering features, or anything of that sort; I simply have confidence in the people who are taking care of it, and believe it to be a good investment; and I put a large amount of money into the stock of that concern, or say I am largely interested as a bondholder. I should consider that I had a right to have some representation on that board. I might not be able or I might not be willing to go on that board myself, therefore I would nominate some man of my own selection, and I would not think I was doing anything out of the way in so doing.

Senator ROBINSON. When you nominate some man who has no more knowledge of the business transactions of the concern than you have, and probably not as much; a man who is probably a clerk in your office; a man whom you can control and direct, the apparent object and purpose of your naming that clerk as a director is that you can control him and his actions on the board without being openly on the board yourself.

Senator CLARK. Not at all.

Senator ROBINSON. Then why is it that you do not go on the board yourself, but name some one else to do so for you in the case you cited?

Senator CLARK. Because my other operations would not allow me to do so.

Senator ROBINSON. But that clerk does not make a move or turn a hand without your direction?

Senator CLARK. He is there simply as my representative, or the representative of the stock which I hold. Now, that is merely a question of morals and ethics, and on the face of it I do not see anything in either morals or ethics which would be objectionable in the position I have outlined. Of course I have no quarrel with those who, like Senator Robinson, think differently about it.

Senator ROBINSON. I simply wanted to suggest that the answer that Mr. Clark made to the question of Senator Norris—that these directors are always chosen for their knowledge and skill in the business—is not confirmed by the history of transactions of that kind.

Senator CLARK. Well, I could not agree with that statement.

Mr. CLARK. Did I say "always"?

Senator ROBINSON. You did not use the word "always," but you made no exception.

Senator NORRIS. No; no exception.

Senator ROBINSON. Now, I am not criticizing the system; but my observation has been that where a man desires to control several corporations, he can do it more easily where he puts on the board as his representative a man whom he can control absolutely, who has no particular knowledge of the business of the company, and who will conform to the will of his employer. You may proceed, Mr. Clark.

Mr. CLARK. In view of what I have said in regard to the general apprehension that such water power or Electric Trust exists in the country, I think this bill is drawn to prevent operation under it by existing corporations, and with the idea that additional capital and new men can be induced to take up this line of development.

Second, the bill seems to be drawn—and a great deal of evidence has been submitted—on the theory that these water powers of our Western States have a great value and that it is most important that the United States Government should safeguard that value in the interest of the people of those States.

The CHAIRMAN. Well, do you not think that is true, Mr. Clark?

Mr. CLARK. I do not think it is true at all, to the extent that is generally considered. Now, I am speaking from the economic standpoint as a banker; and I do not think that the water powers of this country, whether East or West, have the value which is commonly thought that they have, and which is indicated by a great deal of the testimony which has been submitted. There are several reasons for that, and the condition is changing year by year, very rapidly.

In the first place, the cost of water power is represented by the interest and depreciation on the investment, because the operation cost is nominal. The experience of the last few years has shown that the actual construction cost of water powers has been much more than contemplated by the original conceivers of the enterprises.

Second, the cost of coal-generated or steam-generated power is constantly decreasing, at a really remarkable rate; so that, as was said yesterday, the line of cost of hydroelectric power and the line

of cost of steam-generated power are coming closer and closer together, and in many parts of this country to-day steam power can be generated more cheaply than hydroelectric power.

As an evidence of that, we have in the last few weeks refused to consider a proposition, in the center of one of our greatest markets, in an Eastern State, because a steam-generated power plant could furnish the power cheaper and better than a hydroelectric plant, or better than a number of hydroelectric plants—and it was an enterprise which would have cost $8,000,000 or $10,000,000.

In the case of water powers developed upon public lands, their value is represented by what they can get for their output. The price which they can get for their output depends upon the price at which a similar output developed by hydroelectric plants not situated upon the public domain can be obtained, and the price at which a similar output can be purchased when generated by steam. Those are the factors. They vary in every individual case, but the economic value of a hydroelectric plant on the public domain must, in a large measure, be determined by those factors.

The development of hydroelectric plants as separate and distinct enterprises, without an established market, or without connection with a market, is almost invariably a failure. The history of hydroelectric development in this country has demonstrated that in almost every case. The history of the past three years in hydroelectric development in this country, from the Atlantic to the Pacific, has been that, I think, not one large hydroelectric plant that has been put in operation within the last year or two has earned 6 per cent interest on its actual cost. In some cases—there are not many of them—they have earned that. The experience of the last five years is my reason for making the statement that I think there is a very great misapprehension on the part of some people of this country, on the part of some of the department officials, on the part of Congress in some cases—a very great misapprehension in regard to the value of the plants.

And that is the factor which will determine whether the money can be obtained to build the plants; in other words, these enterprises invariably must come to bankers somewhere, in San Francisco, Chicago, New York, Philadelphia, Boston, St. Louis, or New Orleans, or some of the larger cities of the country, in order to raise money to build their plants. The analysis of the banker always goes to the root of the enterprise; and the promoter must be able to show that he can earn a profit upon the cost of the enterprise over and above bare interest.

When submitted to that analysis, the result of the last few years of actual work done—not experimental or imaginary enterprises—shows that there has not been one large enterprise started in the last few years which has earned 6 per cent interest on its property.

Now, that does not mean that hydroelectric plants can not be developed at a profit; but it does mean that a banker in my position takes into consideration all these facts to determine whether he will go ahead and make another development. As a separate and independent development, depending entirely upon selling power wholesale to a new market not yet located (because this bill limits the power to sell to an existing distribution company, or to sell to a

manufacturer), such an independent enterprise as seems to be contemplated by this bill can not be developed as an economic success.

Third, the supposition seems to be that money can be easily obtained for these construction propositions. That is not the case. There has never been a time in the history of this country, possibly, when the details and conditions of new construction enterprises have been so carefully and closely scrutinized as they are to-day.

I think I may say that one overwhelming cause for that is that the regulatory measures which have been passed—the commission regulation and other requirements of municipalities and State legislatures involving increased expenses—have greatly reduced or largely eliminated the profit in the public utility business, and that the banker, the man who is going to invest his money, is going to consider that element very, very carefully.

Again, going back to the last few years and taking public utility business as a whole all over this country (which a banker must do), the amount of money which has been lost in the depreciation of the securities, bonds, and stocks of public utility companies as a whole throughout the United States amounts to hundreds and hundreds of millions of dollars, and those securities are owned by thousands and thousands of investors all over this country.

The reasons which I have outlined demonstrate the necessity for legislation free from unnecessary restriction, making the legislation as wide open as it is possible to make it, in order to induce the investment of capital in developing these enterprises, which is what is desired; and only by offering such inducements can it be accomplished.

Senator THOMAS. Is it not a fact that all of these enterprises are developed upon borrowed capital?

Mr. CLARK. Upon what?

Senator THOMAS. On borrowed capital.

Mr. CLARK. Yes. But I was wondering what you would consider "borrowed capital."

Senator THOMAS. Well, I suppose if I borrowed from your banking house $1,500 to-morrow upon bonds and secured it by deed of trust or mortgage upon my real estate, if I had any, that would be borrowed capital, would it not?

Mr. CLARK. I will answer your question fully. That explains what I want to say. No; as a rule not more than two-thirds or 75 per cent of the actual cash required in enterprises such as hydroelectric plants is represented by bonds.

Senator THOMAS. How is the rest of the money raised?

Mr. CLARK. The balance of the money is raised by stock, either preferred stock or common stock.

Senator THOMAS. Well, the old-fashioned method of financing an enterprise was by capitalizing a company and selling its stock and using the proceeds of the sale of the stock to develop the enterprise. The modern method is to issue stocks and bonds, is it not, and raise the money, for the most part, upon the bonds, giving the stock, or a good portion of it, as a bonus to the lender for the advance of the money upon the bonds?

Mr. CLARK. The old-fashioned method became impracticable when the requirements were in millions and tens of millions of dollars

instead of small amounts, as we used to raise money for smaller manufacturing enterprises.

Senator THOMAS. It also became impossible very largely because of the substituted method of financing enterprises, by which the investor or purchaser of the bonds secured as a part, if not the greater part, of its profits the transfer of stock, either preferred or common, or both, to him as a bonus——

Mr. CLARK (interposing). I was going to answer the last half of your question, that the substituted method of financing by bonds and stocks, the stock being largely a bonus, or watered stock, has been largely, or almost entirely, superseded in this country by conservative methods of financing.

Senator THOMAS. How recently?

Mr. CLARK. Within the last few years.

Senator THOMAS. Well, that must be very recent, is it not?

Mr. CLARK. Yes; it is recent; and the reason is, I think, that under the restriction and regulation of public-utility bodies in our different States either the issues are controlled by the commissions or the earnings allowed by the rates which they approve do not justify such capitalization.

Senator THOMAS. Do you not think, as to that feature, that the regulations to which you refer are salutary rather than otherwise?

Mr. CLARK. I think, in answering that, I would like to explain what is the cause of a great deal of additional misunderstanding or misapprehension concerning the function of watered stock. I have heard very great authorities recently, in public addresses, make the statement that the reason the corporations in the last 20 years have issued a large amount of watered stock was to confuse or becloud the real issue, when the corporation came up before a regulatory body, as to the real basis of their earnings. You may have heard the same address or read it, but I think it was Mr. Brandeis who made that statement.

I have been in the business 20 years, and I have never heard any such reason for the issue of watered stock; and I want to explain very clearly just why watered stock is issued:

In the development of a new enterprise what the banker has to do is to raise enough money to pay the bill, whatever that is. He can not raise the money for a new, undeveloped enterprise without any earning power whatever at 6 per cent interest; that would be impossible. Any man who had money to invest could get 6 per cent by buying a good bond, by buying Pennsylvania Railroad stock, or a hundred other securities, which cause him no worry or time or consideration; he merely puts his money out at 6 per cent on real-estate mortgage, for example. Therefore we can not get money for a new enterprise unless, in addition to interest on the cost, there will be a profit over and above that. That profit is divided in the case of these public-utility companies this has been the history of the past between the men who actually put up the money, the investors, who are given a share of it as an inducement to them to invest, and the men who have been connected with the conception and the financing of the enterprise.

Senator ROBINSON. In other words, the promoters?

Mr. CLARK. Yes. The promoters in one instance, the bankers in the other.

Senator THOMAS. Yes. Well, this watered stock, issued for this purpose, must be regarded as an item of considerable value, must it not?

Mr. CLARK. It depends upon the earnings entirely.

Senator THOMAS. Well, the banker takes it because he wants more than 6 per cent profit, and he assumes that he is getting that in the watered stock?

Mr. CLARK. The banker takes it for his risk and work in financing.

Senator THOMAS. It makes no difference what he takes it for; he takes it, does he not?

Mr. CLARK. Yes.

Senator THOMAS. And if profits depend upon the addition of that value—the increased value—of the watered stock as time goes on; is that correct?

Mr. CLARK. I do not think I quite understand that question.

Senator THOMAS. The banker's profit is greater or less in proportion as the value of the watered stock afterwards increases or diminishes, is it not?

Mr. CLARK. Yes, sir.

Senator NORRIS. You do not mean to say that the illustration which you gave is the only way, for instance, in which watered stock is issued, do you, Mr. Clark? There are a great many other instances and circumstances under which watered stock is issued; are there not?

Mr. CLARK. I do not know of any such instances.

Senator NORRIS. Or bonds issued without consideration?

Mr. CLARK. I have never had that experience under any circumstances.

Senator NORRIS. Well, I noticed not long ago the case of a public utility corporation which had a capital stock of $6,000,000. It had been in operation for 25 or 30 years, and was a very profitable concern; it had declared dividends sometimes as high as 60 per cent in one year—never below 24 per cent. But they issued certificates of indebtedness for $6,000,000 without any consideration whatever. That was doubling their capitalization. That is, their indebtedness was equal to their stock; and they divided that up among their stockholders.

Mr. CLARK. They could not have done that legally, unless——

Senator NORRIS (interposing). Well, they did it anyhow, like the fellow in jail, although it may not have been legal. They drew 6 per cent on those certificates; and after they had paid that interest for four or five years, they took up the certificates of indebedness and issued bonds for them; and after the bonds had run a while, they made application to the public utilities commission, which had later been given charge of the matter, for the purpose of issuing stock for those bonds.

Now, would you consider that watered stock, when it was finally issued?

Mr. CLARK. The original issue of the certificates of indebtedness could not have been legally made, unless they had sufficient——

Senator NORRIS (interposing). Well, I am not taking that question up. I think it was done legally; but whether legally or illegally, it was done, and stock was eventually issued for it. It took five or six years, perhaps a dozen or fifteen years, before the thing was

finally completed; but in the meantime they were getting interest on it all the time.

Mr. CLARK. Well, if the company had been operating—I think you said 25 or 30 years in the case you gave?

Senator NORRIS. Yes; about that.

Mr. CLARK (continuing). And if that company had been paying as much as 60 per cent dividends, it must have been a very profitable company.

Senator NORRIS. It was a very profitable company.

Mr. CLARK. And they must have accumulated a credit to their profit and loss account of $6,000,000 which belonged to their stockholders.

Senator NORRIS. No; they simply got ashamed of their enormous dividends, I take it; I should judge that that was it. And they simply said, "We will give to every stockholder now a certificate of indebtedness equal to the amount of stock he holds," and they did that, and those certificates drew 6 per cent interest, and they have to pay interest on them at 6 per cent to their stockholders.

Mr. CLARK. Undoubtedly; but they could not have done that legally, under the laws of any State with which I am familiar, unless they had to their credit in their profit-and-loss account that much money. Let me give you an illustration——

Senator NORRIS (interposing). Well, I would like to have you give us an idea whether you consider that that is watered stock?

Mr. CLARK. No, sir; because it absolutely represents value put into the property at 100 cents on the dollar.

Senator NORRIS. It did not represent that amount put into the company?

Mr. CLARK. Well, they could not have issued the certificates of indebtedness unless they had had that amount——

Senator NORRIS (interposing). Well, they did not have any money when they issued the certificates of indebtedness. They issued the certificates of indebtedness because they knew that the money was going to come in, and they did it to cover up the enormous dividends that were attracting the attention of the people they served—at least, I presume that is the reason.

Mr. CLARK. The only way that they could legally have done that was, if $6,000,000 of cash had gone into their property and had not been capitalized.

Senator NORRIS. I do not think you get the idea. Suppose they had had $6,000,000 in the treasury and had done that; it would not have affected that $6,000,000 in the treasury. From the time they were issued those certificates of indebtedness would have no connection whatever with the money they had in the treasury at the time. Those certificates of indebtedness show on their face that the corporation was indebted to the holders of the certificates in whatever amount was stated on the certificate, and that it would pay 6 per cent interest on the certificate. The indication on the paper was that that concern had been running short; that they had borrowed money from these people. Of course, they did not borrow any money, but they simply gave their notes to their stockholders, bearing 6 per cent interest; and they afterwards issued bonds for those notes, and took them up and afterwards canceled the bonds and issued stock for them.

Mr. CLARK. But the inference is that unless they had that $1,000,000 invested in their property they all ought to have gone to jail.

Senator NORRIS. Well, there are a great many cases where such watered stock has been issued where the people doing it ought to have not gone to jail; but that does not answer the question whether or not it is watered stock or not.

Mr. CLARK. It is not watered stock if the cash has gone into the property.

Senator NORRIS. There was not any cash about it.

Mr. CLARK. There must have been or the law was broken.

Senator NORRIS. No; I think at the time it was done that was not illegal. Why, there have been hundreds of instances where old corporations have overnight doubled the amount of their stock and have not gone to jail for doing so; and years and years have passed by until the stock became worth more than 100 cents on the dollars, more than par.

Mr. CLARK. Well, I have been connected with this business for 20 years, and I do not think I have seen that done, except where the value was in the property—from my own experience.

Senator NORRIS. Well, in the instance I gave you the physical value of the property might have been worth that; I do not know whether it was or was not.

Mr. CLARK. My point is that it must have been or they could not have done that legally.

Senator NORRIS. But when they gave the note without any consideration as to whether they had a million dollars' worth of property or 10 cents' worth of property—it does not make any difference—they have given it without consideration in either case.

Mr. CLARK. Shall I proceed, Mr. Chairman?

The CHAIRMAN. Yes; you may proceed, Mr. Clark.

Mr. CLARK. It is most desirable from every standpoint that money should be borrowed for these enterprises at the cheapest possible rate. That can only be done by ample security and long-time security, which means long tenure of title. I do not want to take up the bill in detail, because my talk is on the economic and financial points.

But there must be long tenure of title to enable them to get the money cheaply. Whatever the money costs must go against the enterprise, and the cheaper you get it the cheaper your undertaking becomes.

The risks of the business are such that the inducement of a profit must be offered in order to get the money at all.

In a way, the building up of the water powers of the West is desirable for three different reasons:

First, to conserve the coal and oil resources of the country, which when used up are exhausted.

Second, to assist in bringing manufacturing enterprises to that western country, which is the country in question.

Third, to supply the requirements of the public utilities companies which are so intimately connected with the progress and upbuilding of all of the Western States.

Now, I want to impress upon you the fact that there is a great diversity of interest in the men, and in the resources of the different

people who are connected with the public utility business on the Pacific Coast, including Colorado—the whole Rocky Mountain and Pacific coast regions. You have representatives here to-day from a good many of the different companies. I never saw most of them until this week, when this matter came up. That shows you how intimately I am connected with them. I have heard of them by name, because they are men of reputation and standing. Those men, and the stockholders and bondholders of the companies they represent, in the Pacific Coast and Rocky Mountain region, have invested hundreds and hundreds of millions of dollars within the last 10 years. Most of this work has come on within the last 10 years. If it is the object of this bill to prevent those men and their clients, the people back of them, from investing money in enterprises in those Western States, I think the bill is properly drawn. If the intention of the bill is to encourage some outsider to come in and develop hydroelectric plants, I think the bill is properly drawn; but the undertaking of the independent outsider in my opinion will be doomed to failure; and therefore the result desired will not be accomplished.

In other words, there should be no limitation as to the amount of power which can be sold to a manufacturing concern, because nothing better can happen in that country than to have one of these water powers developed and a large industry which will employ a great many men located right at that development and the business built up and all of the advantages which will necessarily follow such a development ensue to that community.

Again, there should be no restriction whatever as to the right of such development to sell to distribution companies. The fact that it is put into the hands of the Secretary of the Interior gives no tenure of title and no security to the bondholder, and the bondholder will not take bonds—we have had several instances of that in the last few years—when the bonds are based upon individual consent; it must be a matter of law.

The whole western country has been built up——

Senator THOMAS. What do you mean by your statement that "they will not take bonds based upon individual consent"?

Mr. CLARK. The theory of this bill, Senator, is that the Secretary of the Interior shall consent to almost every function under it.

Senator THOMAS. I understand what you mean now.

Mr. CLARK. There is no authority, except in the discretion of the Secretary of the Interior, to do certain things. And that office changes every four years, and perhaps oftener, and it is absolutely optional with the Secretary of the Interior.

Senator THOMAS. As far as that is concerned, that discretion given to the Secretary is exercised by his subordinates in nine hundred and ninety-nine cases out of one thousand.

Mr. CLARK. That makes it all the worse.

Senator THOMAS. If the Secretary attempted to exercise all the discretion imposed upon him by the various statutes of the United States and performed the various duties of his office personally he would have to multiply himself four or five hundred times. This discretion will be scattered among his subordinates all over the United States. But one of the serious criticisms I have is that it will multiply the present force of the Secretary at least once, and to that extent distribute and diffuse this discretion among a great many

more subordinates coming in contact with the western people and producing, in all probability, a greater or less degree of irritation.

Mr. CLARK. Undoubtedly.

The CHAIRMAN. In that connection, Senator, do you think this bill would confer any greater discretion or power upon the Secretary of the Interior than the present laws, under which he has almost unlimited discretion and power in everything?

Senator THOMAS. I was not raising that objection, but the discretion which the present law places in the Secretary already is a discretion which it is a physical impossibility for him, individually, to exercise.

The CHAIRMAN. So the new law would not be any better in that respect?

Senator THOMAS. No. The Forest Service, for instance, has a list of regulation assuming to come from the Secretary, that is half as big as that [indicating], and I suppose they were drawn by a considerable number of officials in the department.

The CHAIRMAN. Or from time to time in the field.

Senator NORRIS. And by men, probably, who knew a great deal more about it than the Secretary did.

Senator THOMAS. Oh, they perhaps know more about it than the Secretary, but, at the same time, there are so many of those regulations that when a man goes on a forest reserve he is lucky if he gets out with his clothes on. [Laughter.]

Mr. CLARK. Mr. Chairman, as to the statement that the investor and the banker——

Senator NORRIS. On that question, if you will permit me: Do you think now, from a banker's standpoint, the bill would be strengthened if it did not have the limitation there on corporations selling the products to a distributing company?

Mr. CLARK. Yes, sir.

Senator NORRIS. Well, why would a banker care, who had the bonds, whether he sold to a distributing company, or whether the company itself distributed and sold it to the consumers direct?

Mr. CLARK. Because there are only two markets. One is the manufacturer, and he must be induced to locate before the plant is financed, otherwise the banker has no security. Secondly, there are the distributing companies which serve the territory adjacent to the development. If, therefore, it is impossible to sell to a distributing company without the consent of the Secretary of the Interior, and selling to any one consumer is limited to 50 per cent of the output, and then——

Senator NORRIS. I am not talking of that particular provision. I want to get your idea of this other one. My own idea is that that provision ought to be amended to give an additional discretion to the Secretary of the Interior. But what I can not see myself is why it would make any difference from the investor's standpoint whether the product was distributed to the consumer through an intervening corporation or whether it was distributed directly by the manufacturing corporation.

Mr. CLARK. On the theory that the manufacturing corporation would go into the markets in competition with existing companies?

Senator NORRIS. Oh, no. There is no question of competition in it at all. But you say you want the manufacturing company to be

allowed to sell the products to a middleman so that he can sell to another man and thus distribute it to the consumer. Now, the bill prohibits that unless the Secretary consents that it should be done.

My point is why it would make any difference to the investor in the bonds of the company whether the company distributed it and sold it direct to the consumer, or whether they oiled another corporation through which it would probably, then, reach the consumer.

Mr. CLARK. No difference provided the manufacturer of the power had a distribution system of his own. But, in the State of California, as an illustration (and this is true in other States in this country), the public-service commissions have not allowed a new company to come into a distributing market in competition with an existing company providing the existing company was giving adequate service at fair prices.

Senator NORRIS. Yes. Well, they would do that whether they produced it or some other corporation; that would not affect that.

Mr. CLARK. But, Senator, there is no such opportunity. There is no such distribution possible by the generating company without going into the territory occupied by some other company.

Senator NORRIS. In most places that is true.

Mr. CLARK. That is true all over this country as far as my knowledge goes.

Senator NORRIS. But if you were to go into that community by any intervening corporation you have the same proposition to meet. There is not any difference, as far as I can see in going into a locality already supplied with electric energy whether you go in with two corporations and run with two, or whether you go in with only one.

Mr. CLARK. Except the public-service commissions would not allow it.

Senator NORRIS. And if they won't allow you to go in without an intervening corporation, then they would not allow you to go in with an intervening corporation, would they?

Mr. CLARK. They won't allow us to go in with or without an intervening corporation.

Senator NORRIS. Exactly. Now admitting that for the sake of argument to be true, then what difference does it make in this bill?

Mr. CLARK. The difference is this, that a new hydroelectric plant will have absolutely no market for its power. It must sell either to a distributing company or a manufacturer. It can not sell itself in a market that is occupied by an existing distribution company.

Senator NORRIS. Then suppose it goes in and sells to a distributing corporation and that distributing corporation can not sell to the consumer or to a manufacturer. Do you suppose they would go in? The distributing company has got to dispose of it.

Mr. CLARK. Under the bill the sale to a distribution company is prohibited, except with the consent of the Secretary.

Senator NORRIS. Exactly. Now, what I am trying to glean from this, what I am trying to have you understand—at least I understand it that way—is that if you can not go into a community without a distributing corporation then you can not go in with a distributing corporation; because the distributing corporation has got to sell the product.

Mr. CLARK. Is your conclusion from that that there would be no justification for hydroelectric development?

Senator NORRIS. You put a case where the commission of California won't allow them to go in and establish the business. Now, if you had a distributing corporation intervening I judge you would get in in some way. But I say suppose you did? If there is nobody to whom to sell it, either consumer or manufacturer, why the distributing company would not have any place to sell the product and of course they would not buy it.

Mr. CLARK. Oh, I see what you mean. The answer to that is this, Senator, that the distributing company will buy the power when it has the market through its increasing business or if it can afford to put off steam generation thereby.

Senator NORRIS. Yes; I see that point now, too.

Mr. CLARK. And that is the basis, and the only basis, upon which any existing corporations in the Western States will agree to develop additional hydroelectric power.

Senator NORRIS. Now, I think you have put a case where it seems to me certainly easy to see where there are a good many cases where it would be right to sell to a distributing corporation. The theory of this bill, at least as I understand it, is that they want to keep out a distributing corporation wherever they can, and hence they give the discretion to the Secretary of the Interior wherever it is necessary to allow them to sell to a distributing corporation under extraordinary circumstances, so that he can give consent to do it. But, ordinarily speaking, the bill wants to protect the consumer and recognizes the fact that if there is a distributing corporation intervening between the consumer and the manufacturer it would increase the expense somewhat. Or at least that is the theory of it.

Mr. CLARK. I do not see that is the case at all, because there must necessarily be a distributing corporation under either plan.

Senator NORRIS. In other words, two corporations instead of one. The middleman will make a profit out of it anyway.

Mr. CLARK. The public-utility commissions, I think, brush aside all such considerations and go right to the foundation to see what the investment is in the total property involved. So that consideration is eliminated.

Mr. Chairman, in closing I merely want to advance the reasons which I have stated referring to the possibility of getting money for these enterprises and the conditions which affect the security; that is, tenure of office, or title and the freedom from restrictions (the same restrictions or regulations are amply covered by regulations of the States and exercised to-day) and to urge upon you the necessity for opportunity in this building up of hydroelectric development in the Western States. The history of the development of the whole western half of the country, and, in fact, the whole country, but more particularly the western half, has been one of opportunity, whether to the agriculturist, the railroad, the manufacturer, or the public-utility company or any line of human endeavor. It has been a history of opportunity where a man or group of men could go and have before them the magnet of the opportunity to make money. There is absolutely no other basis, except governmental ownership, upon which money can be secured to go into a construction enterprise involving necessarily a great many risks of success. There is not in this situation to-day that magnet unless the legislation is so free from limitations and restrictions that calculations can be accu-

rately made by the men who have to analyze the pros and the cons of the whole situation.

I think the bill as drawn will not result in accomplishing its object at all. The gentlemen you have had before you have evidenced some points which they do not favor. No doubt the testimony which you will take in the future will give you other points. My argument is in favor of the simplest kind of constructive legislation.

I thank you.

The CHAIRMAN. We are very much obliged to you, Mr. Clark.

(Thereupon, at 1 o'clock p. m., the committee adjourned until Monday, December 14, 1914, at 10 o'clock a. m.)

WATER-POWER BILL.

MONDAY, DECEMBER 14, 1914.

COMMITTEE ON PUBLIC LANDS,
UNITED STATES SENATE,
Washington, D. C.

The committee met pursuant to adjournment at 10 o'clock a. m.

Present: Senators Myers (chairman), Robinson, Smoot, Works, Chamberlain, Norris, and Sterling.

The CHAIRMAN. I believe we are to hear from Mr. Ward this morning.

STATEMENT OF GEORGE C. WARD, VICE PRESIDENT OF THE PACIFIC LIGHT & POWER CORPORATION, LOS ANGELES, CAL.

Mr. WARD. I have only a few remarks to make. We are an operating company, operating in both hydroelectric and steam. Our lines extend over several counties in southern California, both for power and light, including the city of Los Angeles.

Originally, before the electric companies came into business in southern California, all of the irrigation was done by ditches from running streams, and of course these ditches could only take care of the portion of ground that was below the ditch level. For example, with an orange grove on this side of the road [indicating], on the other side of the road, which might be 10 feet higher, it would be waste and barren land, although the soil equally as fertile.

Later on, after the discover of oil, wells were sunk and steam power injected for irrigation. But this, to a large extent, was expensive in installation and operation, requiring the services of an engineer to operate the steam plant. So, consequently, there were only a few steam plants put in operation, for the reason that the small landowner, the 40-acre man or the 10-acre man, of course, could not operate a steam plant, and very little of that development went on until the electric development took place. And at the present time our lines, in connection with various other lines, cover the territory of southern California pretty compactly.

Fortunately, nature there has provided a large underground supply of water, particularly so in California, at varying depths from 15 to 200 or 300 feet, whatever the flow seems to be, and by extension of these electric lines has brought hundreds of thousands of acres under cultivation and enhanced the value of these lands

manyfold. Of course the furnishing of cheap electricity in the Western States will do as much, if not more, for their development, I think, than anything else that can be done at the present time.

To sell cheaply, however, we must develop in large units. For illustration, take, say, a small power house with two 300-kilowatt generators, and another power house with, say, two 15,000-kilowatt generators; the operation expense is very little more in the latter than in the former, while the output is 500 times greater.

Besides cost of operation of the power house, we have the cost of operation, maintenance, and construction of several transmission lines as against the cost, operation, and construction of one. The answer is obvious.

On this line I wish to state that a little over a year ago our company gave up its interest in a hydroelectric development on the San Gabriel River, in California, after spending over $150,000 in tunnels, camps, trails, and various things that were necessary to make the development, for the reason that after the development was made for the money expended it was not going to prove profitable. The permit is now canceled.

Senator CLARK. Are you operating largely on Government land?

Mr. WARD. Both.

Senator CLARK. And your title to your operations on Government land, is that a revocable permit?

Mr. WARD. Yes, sir. The purpose of the bill under discussion, as I understand it, is to more fully and economically develop the water powers of the United States for electric energy. And to do so it seems to me that it must be so framed as to attract the attention of the investor, and, at least, it must be placed on a par with other large similar undertakings.

There are several objections that I would enumerate.

First, section 1 provides that no longer than 50 years. This, it seems to me, should be not less than 50 years, and after the expiration of the said period said right shall continue until terminated and compensation has been made for the fair value of the property, and for all the property; that is, for all the transmission lines and contingent properties.

If we go in to develop a large plant on Government lands, say a 400,000 horsepower installation, the termination of the contract without some consideration is taken of the transmission lines and the contingent lines for distribution would certainly make it very hard to interest people to go ahead with an enterprise of that kind.

Section 2 provides that at no time shall a contract for the delivery to any consumer of electrical energy in excess of 50 per cent be made. Many plants are constructed with one consumer taking more than 50 per cent. In fact many plants would not have been constructed if there was not a customer for more than 50 per cent to start with.

Senator CHAMBERLAIN. Where one customer takes more than 50 per cent, is it usual for that customer to sublet the power to others?

Mr. WARD. No; it is not usual. There might be a development of 10,000 and that customer might want six or seven thousand himself. That might be the means for starting the power development, that you had a contract for six or seven thousand to start with.

I understand there are several who have, in fact, been asked to make propositions on some very large developments at the present time that would require a large horsepower, and I think that any one of those large developments would require more than 50 per cent of any electric development in the United States to-day. I may be wrong about that, but I think that is so.

Section 4 provides, except in cases of emergency, no power shall be sold to a distributing company except by consent of the Secretary of the Interior. As I stated before, that particularly applies to our company in this way: We develop in large units—30,000 kilowatts to a development; that is, two machines. We get up to the point where our load has caught up with our developments and we go on with a new development and develop the 30,000. Now, we have that 30,000 to spare to somebody until the load catches up again. There is really no market for that 30,000 on an intermittent contract, you might say, unless it is some other distributing company. Now, that other distributing company may be in the same condition that we are. They may be carrying ahead a development of their own. It may take a couple of years to get theirs completed. That gives us an opportunity to sell the 30,000 and thereby reduce the fixed charge for operating expense, and eventually the consumer gets the benefit. If that were not permissible, we would have to hold that 30,000 in abeyance until our load caught up.

Senator STERLING. Will you just explain that expression to me a little further? What do you mean there by "load"?

Mr. WARD. I mean the load of the plant—what the output of the plant is.

Senator CLARK. What the plant can generate?

Mr. WARD. Yes; what the plant can generate.

Senator STERLING. I see; you mean the load it can carry?

Mr. WARD. Yes; the load it can carry. It is the amount of electricity, which we term as "load of electricity."

Now, it seems to me that to interest investors in an enterprise of that nature an entanglement of that kind should be eliminated. While, apparently, on the face of it it is right and looks right, to the man to whom you go to put in his $100 or $1,000, to take a bond or stock to help out the proposition, which we all have to do, it makes another obstacle to explain. And I assure you it is not the easiest matter in the world to raise money for water-power development. It should be the one public utility in this country that should be considered to be one of the best investments for anybody to make.

Section 5 refers to taking over the property. It goes on to state, but not in these terms, that the United States can take over the property at the termination of the lease at the depreciated value, not the fair value.

Senator CLARK. Just make that statement again, please.

Mr. WARD. It should pay the fair value and not the depreciated value.

Senator CLARK. It might be a depreciated value and not be a fair value?

Mr. WARD. Well, it shall take it over at the fair value, not the depreciated value altogether.

Senator CLARK. Yes; I know. But if it was an old plant they might give a fair value for the old plant and it might be very much depreciated from original cost. I do not want to misunderstand you.

Mr. WARD. In fixing our rates in the State of California, the railroad commission has adopted the theory of fixing the rates on 100 per cent efficiency; that is, the plant is supposed to be kept up to efficiency.

Senator CLARK. Yes.

Mr. WARD. Now, with the various engineering firms and expert engineers, possibly they are without experience in the operations in the different States and the different conditions. In other words, under certain operations on the Pacific coast copper wire will go out in two or three years. Back in the country copper wire will last I do not know how long. And conditions are different in all of the different States for fixing the depreciated value. It is most customary in fixing depreciated value to take a term of years and multiply it by a certain per cent. That might answer for one plant and might not answer for another, because the plant might not be to that extent depreciated.

Senator CLARK. My question is based on this proposition: I supposed where these public utilities are taken over they are taken over not on any percentage basis as to what is the annual depreciation, but they are taken over upon a view and appraisement of the actual property as it then appears.

That might be very much depreciated.

Mr. WARD. Oh, certainly, that might be.

Senator CLARK. So I would not want you to read into the section here the words that you use, that they would be taken over at the fair value and not at a depreciated value, because I could not agree with that statement. The depreciated value, however, might be a fair value for the property.

Mr. WARD. That is true, Senator.

Senator CLARK. That is all. I did not want you to inject into the record such an interpretation as that.

Mr. WARD. I had in mind the taking over on depreciated value on a percentage basis. That is customarily the way of arriving at depreciated value, but, of course, I could hardly expect you to take over the plant at anything more than it was worth.

About lines 4 and 5, page 5, the act speaks of actual costs of rights of way, lands, and interest therein purchased and used by the lessee. I do not know whether in this eastern country conditions are similar to conditions in the West, as it has been many years since I have been in operation here, but the values of property to a large extent are stationary; that is, the values of property have not increased the way they have in the Western States by means of the large population and making lands tillable, opening up factory sites, etc. When a power plant goes down through the country it buys its rights of way or acquires its rights of way and its power stations and the various lands that are necessary--pole yards. I do not know how many acres we have in the city of Los Angeles, with pole yards and lands that we absolutely could not purchase to-day for anything like what we did pay for them 12 or 14 years ago; in many cases they have increased 500 per cent. Now, the party who buys along with us, the investor who buys a lot or the investor who buys a farm and

subdivides it into city lots—it was only a few years ago that the city of Pasadena was sold for $7 an acre.

Senator CLARK. I think now you are opening up a pretty broad field for discussion there, and I am glad you are speaking about it. The question as to whether the unearned increment shall be considered, I think, is a question that our people are very much concerned with now in this physical valuation of the railroads, as to what shall constitute the basis of valuation, and I suppose it is a question that will not be settled until long after we pass this bill.

Senator WORKS. Probably not until after we pass.

Senator CLARK. And long after that.

Senator NORRIS. There is a question whether we won't pass before the bill does, at the rate we are going.

Mr. WARD. I want to speak of it as a line of investment for the investor who is going to put his money into the proposition. Will he not be more attracted to put it into a building lot than he will to put it into a piece of property that is being used for a pole yard, very likely?

Senator WORKS. He would in Los Angeles.

Mr. WARD. Well, I am speaking of my experience, largely, Judge, in Los Angeles. That is our principal field of operation—in Los Angeles County.

The development company, through the interest of the community in obtaining the development, might receive at less than actual cost as an inducement for development rights of way, water rights, lands, and interest, besides paying the market value at that time. These shall be paid for at actual cost. Consequently every opportunity for any profit, no matter how legitimate, is excluded. When the companies have to deliver up the property that must be purchased at 100 per cent of its value, and that will commence to depreciate as soon as acquired and used, the tables are immediately turned. And these properties that can not enhance, but must depreciate, are to be taken over at their reasonable value at the time of taking.

Senator CLARK. Let me ask you there: In your system of bookkeeping do not the power companies, the same as other companies of like nature, make it a practice of writing off a certain per cent for depreciation each year?

Mr. WARD. Certainly; they write off the depreciation each year—charge off the depreciation.

Senator CLARK. They charge off the depreciation?

Mr. WARD. Yes, sir.

Senator CLARK. Then the depreciation you think your clients would suffer has already been paid for by the use of that per cent, has it not?

Mr. WARD. The repairs and renewals are supposed to keep that up, Senator.

Senator CLARK. Your repairs and renewals. That varies, of course, in different sorts of corporations. Are your repairs and renewals not paid out of the current receipts of your company?

Mr. WARD. Yes, sir.

Senator CLARK. Then, they are also provided for by the consumer?

Mr. WARD. But not in the capital account.

Senator CLARK. You do not put it in the capital account?

Mr. WARD. No.

Senator CLARK. And do not issue new bonds or stock for the renewals?

Mr. WARD. No.

Senator CLARK. They are paid out of the profits of your company, are they not—out of the current receipts?

Mr. WARD. Yes, sir.

Senator CLARK. Then your customers are taking care of this depreciation, are they not, so that the company itself is out nothing by the depreciation of their property? That is, the stock and the bonds are out nothing toward taking care of your depreciation and you pay your dividends out of your net profits?

Senator WORKS. It is hardly fair to say they are meeting the depreciation. They are meeting the actual repairs that are made. But the whole system is gradually depreciating.

Senator CLARK. I was just following up what I understood him to say, that they made their repairs and the repairs took care of their depreciations and renewals. I am just trying to get at the way you transact your business.

Mr. WARD. As a matter of fact with our companies there, the properties have been kept up out of the earnings of the company and the dividends on the stock have been passed. And that is, I think, the case with every development company in the State of California to a large extent—that the earned dividends have been passed since the inception of the large operations of our companies.

Senator CLARK. What dividends have your company paid?

Mr. WARD. Our company has paid a dividend on its first preferred stock of the authorized $5,000,000.

Senator CLARK. I know, but what per cent?

Mr. WARD. Six per cent.

Senator CLARK. They have paid 6 per cent?

Mr. WARD. Yes.

Senator CLARK. You have second preferred stock also?

Mr. WARD. Yes, sir.

Senator CLARK. Has there been any dividend declared on that?

Mr. WARD. There has never been.

Senator CLARK. And no dividend on your common stock?

Mr. WARD. No, sir.

Senator CLARK. What proportion does the first preferred stock bear to all the stock?

Mr. WARD. Well, I think we have $5,000,000 of first preferred, $10,000,000 of second, and the balance is common with a $40,000,000 capitalization.

Senator CLARK. Not a very flattering investment, is it?

Mr. WARD. It has never been, so far. It has been a development.

Senator CLARK. How long have you been in operation?

Mr. WARD. Our company has been in operation—the original company was organized, I think, the old San Gabriel River Co. was organized, I think, in 1893. I am not familiar with that figure, but Mr. Merrill may have some figures on that. I think, although I will not be certain, it was somewhere in 1893—between 1893 and 1895.

Mr. MERRILL. It was sometime later than that, because the San Antonio Plant was later than that.

Mr. WARD. It is along in the nineties.

Senator CLARK. How much actual money has gone into your plants and developments?

Mr. WARD. I can not state, offhand. Between $31,000,000 and $33,000,000.

Senator CLARK. Has all the stock been sold or apportioned?

Mr. WARD. There is a portion of it that has been sold.

Senator CLARK. What is your outstanding stock now?

Mr. WARD. I think there is $5,000,000, practically, outstanding of the first preferred and I think about all of the second preferred and about half of the common.

Senator CLARK. And what is your bonded indebtedness?

Mr. WARD. Our authorized bonded indebtedness is $35,000,000.

Senator CLARK. Then your plant, thus far, has been practically constructed out of your sale of bonds?

Mr. WARD. No.

Senator CLARK. The bonds have not been sold?

Mr. WARD. Some of the bonds have not been sold; no. The outstanding bonds, I think, are about $23,000,000.

Senator CLARK. With $38,000,000 authorized?

Mr. WARD. Yes; for the future constructions.

Senator WORKS. The old San Gabriel plant was a very small concern, was it not?

Mr. WARD. Yes, sir.

Senator WORKS. And your larger improvements have come much later, have they not?

Mr. WARD. Yes, sir.

Senator WORKS. You are developing on the Kern River, are you not?

Mr. WARD. We have a development on the Kern River now, but our new development is on the Big Creek.

Senator WORKS. I know. How long has the Kern River plant been in operation?

Mr. WARD. Since 1905.

Senator WORKS. And the other plant you mention is more extensive than either of the others?

Mr. WARD. Yes, sir.

Senator WORKS. And is that in operation now?

Mr. WARD. Our new plant?

Senator WORKS. Yes.

Mr. WARD. Yes, sir.

Senator WORKS. How long has it been in operation?

Mr. WARD. From the latter part of November or the 1st of December, 1913—just about a year.

Senator WORKS. Then that is practically a new development?

Mr. WARD. Yes, sir.

Senator WORKS. Has that system been entirely developed or only partially?

Mr. WARD. Only partially.

Senator WORKS. What amount of money has been expended on it up to the present time?

Mr. WARD. About $13,000,000.

Senator WORKS. What is the estimated cost if completed?

Mr. WARD. Well, Senator, we have not gotten an estimate of what it will cost to complete it. The permits that we have taken out at

the present time include two more developments, what we call No. 3 and No. 4, which takes this same water and carries it down through two more developments. These two developments we have just completed; one is practically 2,100 feet or 2,050, and the other is 1,950. At the end of the first development we put in a canal about 5 miles to the forebed of the second development to carry down 1,950 on to the second power house.

Senator WORKS. You could approximate what it is expected the entire development will cost, could you not?

Mr. WARD. I presume it will cost something like $60,000,000.

Senator STERLING. Have you more than one completed development now?

Mr. WARD. On this development, you mean?

Senator STERLING. Yes.

Mr. WARD. Yes; there are two on this.

Senator STERLING. How many plants have you completely developed—your company?

Mr. WARD. I think we have six water plants and one steam plant.

Senator STERLING. You stated a while ago that you had paid no dividends except on first preferred stock. Is that in the way of a dividend, so called, or is it in the way of interest on the stock?

Mr. WARD. That would be dividend on the stock, or interest on the stock. The stock represents par.

Senator STERLING. Have the surplus earnings from your plants gone into extensions?

Mr. WARD. Yes, sir.

Senator STERLING. Instead of dividends?

Mr. WARD. Yes, sir.

Senator STERLING. On the second preferred stock and on the common stock?

Mr. WARD. Yes, sir. More for renewals than extensions.

Senator STERLING. Can you state how much?

Mr. WARD. No; I can not. I have not been connected with the company long enough for that.

Senator NORRIS. Have there been any dividends paid except on first preferred?

Mr. WARD. No, sir.

Senator NORRIS. Outside of first preferred, what stock has been issued? You have second preferred, have you?

Mr. WARD. Yes.

Senator NORRIS. How much?

Senator WORKS. You gave that a while ago, did you not?

Senator CLARK. Not exactly; he gave the percentages.

Senator NORRIS. Approximately, if you can not give it definitely?

Mr. WARD. Well, there is very little left of the first preferred. That is $5,000,000. And there has been about $10,000,000 of the second preferred issued. The common I do not recollect. I do not recollect how much common has been issued.

Senator NORRIS. At what price was the second preferred issued? What consideration did you get for it when you issued it?

Mr. WARD. There has not been any of that sold for a number of years, 8 or 10 years, that I know of, and I do not know what the consideration was at the time it was sold.

Senator NORRIS. At what price was the common issued—the common stock?

Mr. WARD. That is the same case; I could not say.

Senator NORRIS. Was any of this stock given as a bonus to purchasers of the bonds?

Mr. WARD. No; there was no stock offered with the bonds at all.

Senator NORRIS. There has been something gotten in return for all the stock that has been issued, has there—some money consideration in every issue of stock?

Mr. WARD. Well, some of the first preferred stock was issued for outstanding floating debt. Some of the first preferred stock was issued to take up a prior indebtedness.

Senator NORRIS. That has paid some dividends?

Mr. WARD. Yes.

Senator NORRIS. What I am getting at is this: You say that part of the stock has paid no dividends. I would like to know just what consideration there was coming to the company for the issuance of the stock that has not paid any dividends, whether it was second preferred or common.

Mr. WARD. In many cases the preferred stock, second preferred, was paid to some of the former owners when the smaller properties were taken over altogether.

Senator NORRIS. Given in consideration for property transferred to the company?

Mr. WARD. Yes.

Senator NORRIS. How much of it was issued in that way?

Mr. WARD. I could not say.

Senator NORRIS. You could not give us any idea of the per cent?

Mr. WARD. No; I could not, Senator.

Senator SMOOT. You were not connected with the company at that time?

Mr. WARD. No; I was not connected with the company at that time.

Senator NORRIS. Do you know of any instance in this second preferred or common stock where money was actually paid for its issue?

Mr. WARD. Yes. A portion of it was paid for at the basis of $20 a share.

Senator NORRIS. What is the par value?

Mr. WARD. $100.

Senator NORRIS. Do you know how much was sold at that rate?

Mr. WARD. No; I could not say.

Senator NORRIS. To whom was it sold? Was it sold exclusively to the stockholders or to the public at large?

Mr. WARD. To the public at large.

Senator NORRIS. When was that?

Mr. WARD. Well it has not been recently; not since I have been connected with the company.

Senator STERLING. You mentioned awhile ago that a certain number of the plants had been completely developed—six, I think you said. Now, can you give the value of those completely developed plants? What is your estimate as to the value?

Mr. WARD. No; I am not able to give you the value.

Senator STERLING. Can you of any one of the six—the estimated value or the generally accepted value?

Mr. WARD. All I can give you on the Big Creek is what it actually cost us.

Senator STERLING. What did it cost you?

Mr. WARD. It cost us at that time $12,500,000.

Senator STERLING. And the others you can not give?

Mr. WARD. No; I can not.

Senator STERLING. What is your best judgment as to the actual value of your six developments?

Mr. WARD. You mean a reproduction value, would that be?

Senator STERLING. Yes.

Mr. WARD. I think the reproduction value would be the value that I gave you as having been spent for them. We have tried to keep them up to 100 per cent efficiency as far as possible.

Senator STERLING. What was the value spent for them? I do not now recall what you said.

Mr. WARD. Between $31,000,000 and $33,000,000.

Senator STERLING. And you say the bonds aggregate $38,000,000?

Mr. WARD. Well, the bonds are not issued. The bond issue is created to carry on the development as fast as the development goes on. We can only issue bonds in California for 85 per cent of the value of the investment. The balance of it has got to be taken up in some other way.

Senator CLARK. How long have you been connected officially with the company?

Mr. WARD. About two years.

Senator WORKS. You had no connection with the issuance of stock at all, did you?

Mr. WARD. No, sir; I did not. I became connected with it about the time we started that Big Creek development.

Senator STERLING. You said a moment ago that the bonds have not been issued. You did not mean to say by that that no bonds at all had been issued?

Mr. WARD. No; not to the extent of the authorized issue.

Senator STERLING. What amount of bonds have you issued?

Mr. WARD. I can not tell you, only offhand, something like, I think, $24,000,000 or $26,000,000. I am not very good at remembering figures about those things.

Senator STERLING. Can you state now what the bonds have sold for?

Mr. WARD. I think those bonds were quoted from 87 to 92, something like that. Recently I do not know at what they are quoted.

Senator STERLING. Were they negotiated or sold?

Mr. WARD. No; I do not think they were, Senator. In fact, I know they were not.

Senator SMOOT. What rate of interest do they carry?

Mr. WARD. Five per cent.

Senator WORKS. Were they sold before the present railroad-commission act took effect?

Mr. WARD. Yes; they were, Senator; about a year previous.

Senator WORKS. Under the present law the commission fixes the price at which bonds shall be sold?

Mr. WARD. Yes, sir. The last bonds were sold, or were to be sold, at not less than 85. They fixed the minimum at not less than 85. We disposed of a million and a half bonds this year on the basis of 85. The commission fixes the price of the bonds and the stock. You recollect that we can not issue a share of stock or sell a share of stock—the companies can not in California—without the consent of the railroad commission and not below the minimum price fixed by the commission. It is the same way with the bonds.

Senator STERLING. The minimum price which they fix. That is not a fixed price, but the minimum?

Mr. WARD. No; they fix the price at the hearings.

Senator STERLING. Do they fix the price absolutely, or fix a minimum price?

Mr. WARD. They fix a minimum price.

Senator CLARK. These bonds are issued or sold in installments as you need them for your development?

Mr. WARD. Yes, sir.

Senator CLARK. Of course, those bonds cover the entire property now held?

Mr. WARD. Yes, sir.

Senator CLARK. Is there any seniority in these bonds? Take bonds issued to-day; do they carry the same security as a bond that was issued five years ago? In other words, do all the authorized bonds have the same rights legally that other bond do?

Mr. WARD. Not exactly. The old San Gabriel Electric Co. was the first company, and it has $100,000 bonds still out.

Senator CLARK. I mean the bonds of your present company.

Mr. WARD. The bonds of our present company?

Senator CLARK. The $35,000,000 you speak of have the same rights and priorities?

Mr. WARD. Yes, sir.

Senator CLARK. Time of issue makes no difference?

Mr. WARD. Except a certain number of the bonds were set aside for the old company bonds that were not taken in.

Senator CLARK. Yes; but they have no privileges that the balance of the bond issue does not have?

Mr. WARD. No, sir.

Senator CLARK. That is what I was trying to get at.

Senator WORKS. Do you want to make any further statement, Mr. Ward, or had you finished when you were interrupted?

Mr. WARD. Just a few more words here. I think I left off on the value of the property taken over. All the property on which there is any increase in value is taken over at the cost acquisition, and all property that must depreciate is taken over at the depreciated value. And the last clause of that section—"or any intangible element"—is a very sweeping clause. It might include many things, and has a tendency to discourage development.

Senator NORRIS. I have wondered what it did include. You say it might include a great many things. Can you tell us just what in your judgment it would include?

Mr. WARD. I do not know, Senator, what it would include.

Senator NORRIS. It would not be very harmful if it did not include anything; but if it does include a good many things, I would like to know what they are.

Mr. WARD. I do not know what it would include.

Senator CLARK. I suppose the purpose is to cover all the property of the company of all sorts, kinds, and conditions?

Mr. WARD. It is hard for us to tell what will come up within the period of termination.

Senator CLARK. I assume that in general it includes everything?

Mr. WARD. Yes, sir. That is what I assume.

Senator CLARK. That the company steps out with its money or its securities and turns over everything it has. That is what I supposed was meant by taking over the company.

Mr. WARD. Yes. I have nothing further.

The CHAIRMAN. I want to ask you one question: In a case where only 5 per cent or less of the land to be used by these sites and operations of a development company is owned by the Government—that is, only 5 per cent or less than 5 per cent is Government land—and all the balance of it is private land to be acquired by the development company, as it may see fit, what would you think about a provision in this bill that in such a case the Secretary of the Interior should lease that small fraction of Government land to the company for a period of 50 years, or such other term as he may determine, at a nominal rental, and in that case that the company shall not be subject to the conditions, rules, and regulations of this bill, other than that they shall just simply lease this small percentage of land. What would you think of that? Is there anything in there that would be of assistance or not?

Mr. WARD. Offhand, Senator, I see no objection to that.

The CHAIRMAN. Do you know of any cases where the land required by the site and operation of the company is only 5 per cent or less of Government land?

Mr. WARD. That is not in our case at all. I think Mr. Britton suggested something in his case, however.

Senator CLARK. Your initial development is substantially all on Government land, is it not?

Mr. WARD. Our hydroelectric power; yes, sir.

Senator CLARK. That is what I mean.

Mr. WARD. Yes; our hydroelectric power development is all on Government land.

The CHAIRMAN. If you have no particular views on that phase, that is all.

Mr. WARD. I have not.

Senator CHAMBERLAIN. You started in to criticize certain sections of the bill when you were interrupted. Had you finished?

Mr. WARD. I only had those few sections to speak about. I was speaking from an operating standpoint, Senator; that is all.

STATEMENT OF MR. FRANKLIN T. GRIFFITH, OF PORTLAND, OREG., PRESIDENT OF THE PORTLAND RAILWAY, LIGHT & POWER CO.

The CHAIRMAN. You might just give your full name to the stenographer and state for the record for whom you appear.

Mr. GRIFFITH. Franklin T. Griffith, Portland, Oreg. I am president of the Portland Railway, Light & Power Co., operating electric light and power plants, railroads, and street railways in Oregon.

And to show our interest in the subject under discussion, I wish to say that our company has a hydroelectric development of about 50,000 horsepower and about 30,000 horsepower in steam.

It was my thought in discussing this bill to take it up from the standpoint of one who, notwithstanding the fact I am connected with a public service corporation, engaged in hydroelectric development, may at any rate be credited with a willingness to look at conservation and the development of the natural resources from the point of view of one engaged in making that development.

I desire, with your permission, to criticize several of the provisions of the bill which I think will be unworkable and then to suggest what I think will be a plan for bringing about development to the greatest possible extent and with the greatest ease.

I will pass section 1 for the moment and reach section 2, which is the section providing for the continuous carrying on of the work of development. And that is entirely proper. The section carries, also, a provision restricting the sale of electric energy so that not more than 50 per cent of the output may be sold to any one customer.

Gentlemen, at the outset, if a plant was started by an independent concern, having no market at all, its output would be regulated by the amount it sells. If it starts a considerable development, say 10,000 horsepower, presumably being managed by business men—it would not start unless it had some market for some portion of that energy. Usually in the case of independent plants starting to-day, there is a demand for the energy proposed to be developed from some manufacturing company or public utility corporation, having a franchise in a municipality, which purchases the energy at the switchboard, and the only initial customer is such manufacturing institution or public-service corporation.

I have in mind an actual case where a development of 20,000 horsepower was made. The first user of the energy took 5,000 horsepower. That 5,000 horsepower was the output of the plant at the time it was being taken. It was all of the output—100 per cent.

If you were to undertake to restrict the power of the developer in the sale of his energy to a certain customer, it should not be based upon output—50 per cent of the output—but 50 per cent or any other per cent of the capacity or possible output. Because it is 100 per cent in the very beginning, if he starts with one customer. And naturally, as a power man, I do not believe in that provision. I do not believe any good end is served by putting a restriction upon selling the energy in a limited quantity to a single customer. I have realized very fully, as was said by Mr. Finney the other day, that one of the purposes of the bill is to prevent the creation of any new monopoly and to prevent the perpetuation of existing monopolies. That purpose is based upon the further theory that a monopoly is an evil thing—necessarily so. And upon that point I think it is proper, in discussing this particular section, to tell you that we do not agree with that and I do not believe the more advanced theory in the matter of regulation of utilities is in accord with that theory.

I happened yesterday, in reading the New York Times, to run across a decision of the Illinois commission. I want to read just one

paragraph of that decision. This is taken from the New York Times of the 13th—a dispatch from Chicago. The commission said:

Formerly competition seemed to be the only method to protect public interest, but with such comprehensive regulatory laws as are now in force in this State competition has lost its power as a corrective agency. It follows, therefore, that the general plan of consolidation, the commission finds, is in complete harmony with the modern idea of government regulation of public-service corporations.

The whole theory of modern regulation is to avoid duplication of investment and by artificial means, through the regulatory body, to create conditions that were formerly sought to be obtained by actual competition. The legislatures have, in every State, the inherent power to create a regulatory commission, and in 32 of the States they have already created such commissions. It is for the commission, when so created, to determine the actual value of the property of the public-service company, with a view to determining the terms and conditions of service to the consumer. They have the power of an officer of the corporation and may investigate every branch and detail of the business, and they also fix rates, not only the maximum and minimum rates but the actual definite rate to the consumer, deviation from which is punishable by fine or imprisonment. Then you have exactly that condition that would be obtained by competition if the competition itself were regulated so that it would not be ruinous to one or the other of the two competitors.

The theory that competition of public utilities to-day should be unregulated has passed; it is not economic, and it has been superseded by the more enlightened practice of regulated monopoly. When I say "regulated monopoly," I am using words that do not sound well to some people because of the stigma attached to the term "monopoly." But there may be a good monopoly and there may be an evil monopoly. It can not, however, be an evil monopoly if the State discharges its duty and exercises the right it has to regulate. And I want to say to you gentlemen, as a matter of actual experience as an operator in Oregon, that the commission does exercise that power to its absolute limit.

Perhaps you might think, from the way I have spoken about commissions, that I am criticising regulation. But no public-service man in the country to-day who is abreast of the times will raise his voice for a moment to protest against regulation. Regulation means not only safety to the consumer in getting adequate service and reasonable rates, but it means theoretically, at any rate, and ultimately will mean, in fact, protection to the utility in the sense that a public-service company giving adequate service at reasonable rates will be protected in its field and permitted to earn a reasonable return upon the value of its property devoted to public service.

Senator SMOOT. You believe that regulation, however, should be State regulation, do you not?

Mr. GRIFFITH. I believe that it should be State regulation. And upon that point I call your attention to the following section of the bill, which provides that where the operation of the developer is in a Territory or in two or more States that the power to regulate rates shall be vested in the Secretary of the Interior. The authority of the Secretary to regulate is made to depend upon the fact that the energy is developed upon the public domain.

The CHAIRMAN. Mr. Griffith, I will ask you this question in that connection, which you need not answer just now, but may later: In that case how could there be regulation?

I will just invite your attention to that as you go along.

Mr. GRIFFITH. As to interstate business?

The CHAIRMAN. Yes; as to interstate business.

Mr. GRIFFITH. I will answer that right now. This act proceeds upon the theory that the Secretary of the Interior may regulate rates of an individual operating in two or more States, or in a territory, because the individual is developing some portion of his power upon the public domain. The United States, as a landed proprietor——

Senator CLARK. I do not want to agree to that statement entirely, but I will not interrupt you now.

Mr. GRIFFITH. That is the language of the act.

Senator CLARK. What is that?

Mr. GRIFFITH. That—

In case of the development, generation, transmission, and use of power or energy under such a lease in a Territory, or in two or more States, the regulation and control of service and of charges for service to consumers and the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior.

Senator CLARK. Yes; I understand; but my interruption does not refer to the wording of the bill but the theory upon which the Government was given the right to regulate.

Mr. GRIFFITH. The theory upon which the Government is given the right to regulate, if that right is exercised constitutionally, in my opinion, is the right to regulate commerce between the States.

Senator CLARK. Yes; that is what I had reference to.

Mr. GRIFFITH. The Government has that power to regulate commerce between the States as a sovereignty, which power was delegated to it by the several States in the Constitution. But it does not have that power by virtue of ownership of the land.

Senator CLARK. That is what I was questioning.

Mr. GRIFFITH. This act proceeds upon the theory that it may regulate in this particular case where some part of the public domain is used in the generation or transmission of the energy and disregards the broader principle that the United States has the power to regulate, as between States, because of its power to regulate interstate commerce.

Senator CLARK. May I interrupt you right there? I can not agree with that statement as to the theory of the bill, because all this bill deals with is the power to generate upon public lands. And the power to regulate the rate, I think, where the operation was carried on in two States is not dependent upon the bill or upon the fact that the power is generated upon the public domain, but is under the constitutional power, if there is any, which the Government has to regulate interstate commerce.

Senator NORRIS. But why should this power be given to the Secretary of the Interior where the general power to regulate rates is fixed in another body?

Mr. GRIFFITH. Do you mean now the Interstate Commerce Commission or the several State bodies?

Senator NORRIS. Oh, no. I mean the national body. It could only be based upon the theory that the plant is upon Government land.

Mr. GRIFFITH. I think, Senator, that in order to extend the powers of the Interstate Commerce Commission, so as to include the regulation of rates for the transmission of electric energy, there would have to be further legislation by Congress, because the power of the United States to regulate commerce solely rests in Congress, and is to be exercised when the Congress specifies the manner and the extent that it shall be exercised.

Senator ROBINSON. This bill carries a provision that the regulation in such a case as has been specified by the Senator from Wyoming shall be by the Secretary of the Interior or such body as Congress shall prescribe. It simply recognizes the right——

Senator NORRIS. Oh, there is no doubt about our right to do it, but I was questioning the wisdom of this provision in the bill.

Senator CLARK. I question that myself.

Senator ROBINSON. Of course the bill originating in the Public Land Committee of the Senate it does not undertake to broaden the powers or increase the powers of the Interstate Commerce Commission, because this committee perhaps has not jurisdiction of that matter. That would come under another committee. That is one of the principal reasons why this jurisdiction to regulate has been vested in the Secretary of the Interior.

The CHAIRMAN. The bill says the Secretary of the Interior or such other bodies as Congress may designte.

Go ahead, Mr. Griffith, but remember my question, please.

Mr. GRIFFITH. Pursuing the line that was suggested to me by the Senator from Wyoming, I did not criticize the attempt in this bill to authorize the Secretary of the Interior or any other Federal body that may be designted by Congress to regulate rates where the commerce is interstate, assuming, for this argument, that the transmission of energy may be considered as interstate commerce. But if that power is to be exercised at all, I submit to you gentlemen that it should be upon the transmission of energy rather than the transmission of energy generated upon the public domain. In other words, that regardless of the source of energy, if the business itself of transmission from one State to another is interstate commerce, that the power of the Secretary of the Interior or Federal regulatory body should include all companies engaged in the interstate transmission of energy, regardless of the point of generation. Otherwise we are discriminating in the matter of Federal control.

Senator NORRIS. Your point is that it ought to apply, if it is going to apply at all on that ground, to companies that generate their power on private or public land?

Mr. GRIFFITH. It does not make any difference if they are engaged in interstate commerce. The power to regulate would naturally follow if you have the power vested in the Secretary of the Interior.

Senator NORRIS. I see.

Mr. GRIFFITH. In this same section, however, there is another unfortunate thing in the very opening sentence, section 3—

> That in the case of the development, generation, transmission, and use of power or energy under such a lease in a Territory, or in two or more States, the regulation and control of service and of charges for service to consumers and of the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior.

That section will be inoperative unless the power development is made on the States' division lines.

Senator ROBINSON. Is where?

Mr. GRIFFITH. Upon the division line between two States. It would be necessary to have the plant straddling the line between two States. I think possibly that is a typographical error.

Mr. FINNEY. The word "or" should be substituted for "and," in line 13. It is a typographical error.

Mr. GRIFFITH. Another provision of the section which I think is objectionable is that where a development is made under the act on the public domain, even though that development may be made by a power developer having other plants and other transmission lines, it will be impossible to connect the transmission lines from the plant located upon Government lands with the other parts of the system of the developer without first obtaining the consent of the Secretary of the Interior. It seems to be the theory of the framers of the bill—I may be wrong, but it seems to give that impression—that this bill is intended to permit the development of power on the public domain by somebody who is not now in the business, who has no market, no plant, and to prevent an existing concern from going upon the public domain.

The whole theory of the bill, it seems to me, is to permit the development of a new plant, which must create a new market of its own and must develop a distribution system of its own connected solely with a plant constructed upon the public domain.

Considering section 4, it was suggested the other day that while it would be contrary to the theory of the framers of the bill to permit the sale of energy to a distributing company, that such sales might be made in case of emergency for periods not exceeding 30 days, and for longer terms if the consent of the Secretary of the Interior was first obtained. Assuming it would be possible to convince the Secretary of the Interior that it was proper that a developer under this bill should sell to a distribution company because he could not sell to anybody else, perhaps that there was no other market he could get into, yet the provision authorizing the Secretary of the Interior to permit the sale of energy to a distributing company, read in connection with the provisions of section 2, would limit the power of the Secretary of the Interior to permit the sale of energy to no greater extent than 50 per cent of the output.

Taking the bill by its four corners, reading it as a whole and giving effect to every section, while he might under section 4 give his consent to a developer to sell to a distributing company, yet if you give effect to section 2 he could not give his consent to sell to the distributing company more than 50 per cent of the output. And it is entirely conceivable, gentlemen, that developments may be made where the only possible market at the outset is to sell to a distributing company. It surely can not be the intention of the framers or of the Congress of the United States to ask a man to put his money into the development of a plant and wait until an entirely new body of people grew up to use it. He ought to be permitted to put it to the greatest possible use, to the widest use he can possibly make, if we are to encourage development under this act.

Again, in section 4, no lien can be placed upon any of the projects built in accordance with the permit unless the lien is first approved by the Secretary of the Interior.

You are all familiar with the fact that existing companies are financed largely by mortgage bond issues. Seventy-five per cent of your initial cost, 75 per cent of the cost of the improvements and buildings, and sometimes less than 75 per cent of the actual cost is provided through the sale of bonds. Those bonds are in turn secured by trust deeds or mortgages which cover all of the property of the mortgagor and automatically the additions to the property of the mortgager become subject to the lien of the existing mortgage just as rapidly as additions are acquired. Now, then, suppose the Portland Railway, Light & Power Co., for the purpose of illustration only, has a mortgage upon all of its property which automatically extends the lien to everything acquired by the company, when the title to additional property is vested in the company. Then assume that the company wishes to make a development upon the public domain. Before it could make that development, before it could get a permit it must have the Secretary of the Interior's approval of this existing mortgage. We can not see in advance whether it will satisfy the Secretary at the time we are seeking this permit. It is an issue upon which millions of dollars is already outstanding. You would have to get the consent of every bondholder of the seven or eight thousand in order to change any provision in the existing mortgage; and if the Secretary does not approve of any provision in an existing mortgage it will prevent an existing company from making a development, because the lien of a mortgage can not be placed upon the project until that mortgage has first been approved by the Secretary of the Interior.

Senator STERLING. Does that not pertain to future developments of the land which you are mortgaging for the purpose of that development? How will it affect mortgages already created?

Mr. GRIFFITH. The mortgages when created, Senator, provide that "all property owned or hereafter acquired" by the mortgagor company shall be subject to the lien of that mortgage. Otherwise you would require supplemental mortgages every day or two in order to subject recently acquired property to the lien of the existing mortgage. Every bonded concern in the United States is on the same basis.

Senator STERLING. The provision here is "that no lessee under this act shall create any lien upon any power project developed under any permit issued under this act by mortgage or trust deed, except approved by the Secretary of the Interior."

Senator WORKS. But they have already done it.

Senator NORRIS. His point is that they have a mortgage lien before the act is passed. You say that is a general practice?

Mr. GRIFFITH. Absolutely general.

Senator NORRIS. There is no question about the legality of a mortgage upon property which is not in existence at the time it is given?

Mr. GRIFFITH. None at all, Senator; absolutely none. I think we have an afteracquired clause in every mortgage that is given, which goes automatically to property subsequently acquired.

Senator WORKS. I do not think there is any question about the legality of it. I think it has been tested over and over again.

Senator SMOOT. No man who has money to invest would ever invest in an electric-lighting mortgage unless it did include that provision. For instance, they could, in renewing their plant, place it at an entirely different place, and the mortgage would not cover the new plant at all, and their original investment secured by the mortgage that was originally given would be valueless.

Senator NORRIS. Why?

Senator SMOOT. Because the property would not be worth anything.

Senator NORRIS. They could prevent them from using their funds, except for the improvement of the property that was mortgaged, the same as they could if they had a mortgage on a man's farm?

Senator SMOOT. But suppose they let it run down?

Senator NORRIS. Why should not they be subject to the same conditions any other mortgagee is? If you have a mortgage on a farm, if I happened to own one, and I bought another farm with the proceeds, you would not have a mortgage on that?

Senator SMOOT. But you could not pick up the farm and move it?

Senator NORRIS. You can not pick up this property, either.

Senator SMOOT. Yes, you can, in the case of the improvement.

Senator NORRIS. But you can go into a court and prevent their moving it. That happens all the time. And why should they not do the same thing in the case of an electric-power plant?

Senator CHAMBERLAIN. I think we ought to allow the witness to conclude his statement.

Senator CLARK. May I ask this question, and I ask it for information only: You state it is the universal practice in all of these utility bonds that are issued to cover the property now in existence and that which may be acquired in the course of its business by mortgage. I have never owned, but I have seen bonds covered by various mortgages issued by the same corporation quoted, for instance, as first-mortgage bonds, due in such a year, selling at such a price, and second-mortgage bonds at such a price, perhaps due in a different year. I always supposed that those first-mortgage bonds would have a priority, the same as a first and second trust on real estate. Is that not also done with these power plants, that they issue a series of securities at times that have not already been included under the one mortgage?

Mr. GRIFFITH. Senator, there are frequently several issues of bonds for which one company is liable. The large companies of to-day are usually the outgrowth of buying up minor corporations. For instance, I have in mind a corporation which is now the outgrowth of a dozen different corporations which were all consolidated and each had a little mortgage of its own. In the process of consolidation the consolidated company usually retires the smaller bond issues with the proceeds of a bond issue made by the consolidated company. Sometimes we find two or three fairly good sized companies consolidated into one and the mortages issued by each of the consolidated companies then become underlying issues and prior liens on portions of the property owned by the consolidated company, which are ultimately retired with the proceeds of bonds issued by the consolidated company, and thereupon the mortgage issued by the consolidated company becomes the only lien on its property. As to the proposition of issuing second and third mortgage issues by the same com-

pany, they are only issued when the first mortgage is closed and you can not get any more bonds out under it.

Senator CLARK. Now, when this general mortgage is issued, covering these underlying bonds you speak of, suppose the company acquires another property?

Mr. GRIFFITH. That might have an issue of its own which would be assumed by the parent company.

Senator CLARK. And would that mortgage cover the property of the parent company also?

Mr. GRIFFITH. Oh, no; not by any means. If the little company you have just spoken about had lately been acquired and had an issue of bonds of its own, the fact that its physical property was transferred to the larger concern would not make the smaller company's mortgage a lien upon the larger company's other property.

Senator CLARK. Suppose the consolidated company had no bonds, and suppose the large company wanted to purchase it outright?

Mr. GRIFFITH. And did purchase?

Senator CLARK. Yes. How would they secure that purchase money?

Mr. GRIFFITH. The large company would be able—depending upon the provisions of its own mortgage, the big company buying the small one with no bonded indebtedness—to issue bonds to the extent of 75 or 80 per cent of the property it acquired by purchase at its fair cash value. And any difference between the 75 or 80 per cent and the amount that was paid would have to be provided either from the sale of stock, earnings or some other means.

Senator CLARK. The original first mortgage, then, would not cover this newly acquired property?

Mr. GRIFFITH. Oh, yes, sir; it does. The minute the property is acquired by the larger company it becomes subject to the lien of the mortgage already existing. But because it is an additional property, acquired by the company having this mortgage issue, the company is entitled to issue new bonds to cover a certain per cent of the actual cash cost of the newly acquired property, all of the bonds being of the same issue and of the same degree of dignity, one with another.

Senator CLARK. Has not that a tendency to depreciate the value of the first bonds?

Mr. GRIFFITH. No, sir; because as you add to the property of the company you are not permitted to issue bonds to the face value or the actual cash cost of the newly acquired property. There is a margin there of 20 to 30 per cent between the actual cash cost and the par value of bonds you can get out against it.

Senator CLARK. That depends upon your State regulations?

Mr. GRIFFITH. It depends partly upon State regulations. It depends also on your own mortgage provisions, as a mater of fact. Most of our modern mortgages are so closely guarded as to the issue of securities that reputable bonding houses will not handle an issue of bonds that are not issued under a carefully guarded trust deed, and they watch the issuing company so closely that there can not be any watering of bonds. It is really surprising to me sometimes to hear people say bonds are issued for no consideration. You can not get a bonding house to handle bonds unless they are satisfied the bonds are issued for an actual consideration and for an aggregate amount considerably less than the actual cost of your construction. Their reputation is behind them. They are selling the bonds and

must be satisfied that there is ample security in actual value behind them.

Senator WORKS. Now, going back again to the trust deed covering the after-acquired property, it is contemplated, is it not, that the money that is secured from the sale of bonds be used for the purchase of additional property, the very money that you get under your trust deed, and it would be absolutely necessary, in order to protect the bondholders in that case, that the trust deed should extend to the property that is bought with their money?

Mr. GRIFFITH. The after-acquired property, Senator, in all these trust deeds is included, unquestionably.

Senator WORKS. There certainly should be protection to the purchaser under the foreclosure sale?

Mr. GRIFFITH. If the purchaser at a foreclosure sale, on the foreclosure of a mortgage upon the developments made on the public domain, is not to be entitled to possession to the same extent as the mortgagor you will never be able to sell the bonds on that property, because the ultimate chance of foreclosure must be considered by the bond buyers at the time they take the issue. There is no protection here as to that.

And then, gentlemen, what possible difference does it make what the conditions of the mortgage may be, what the conditions of the foreclosure may be, or who may be the final purchaser on foreclosure to the Secretary of the Interior or the United States, if you please; the mortgagee and purchaser at foreclosure sale can secure absolutely no greater right than that given by the Government to the original permittee, and the purchaser will be subject to exactly the same conditions as prescribed in the original permit.

In section 5, upon this question of retaking the property, I think that if the bill were permitted to remain as it is it would be a very difficult thing to construe the "actual cost." Even under the most restrictive provisions of the bill, it is provided that there may be assignments of the permit with the consent of the Secretary. There may be transfers of the title in the term of 50 years. There may be half a dozen transfers of title. And at the expiration of the term of years what is the actual cost to the then holder? What is meant by actual cost? It seems to me you are leading yourselves into all kinds of complications and unnecessary conditions here that might be avoided entirely by simply providing that at the expiration of the term the United States might take over the right it gives, and in case of all the property that is acquired by the permittee from other sources than the United States it shall pay the fair value of the property taken over. That takes into consideration every condition that would be properly considered and put in the act, if you consider that it would be proper under the circumstances, that no value should ever be allowed for the land leased by the United States for the purpose of the development. But as to those things the corporation must put its money into, that it is not answerable for to the United States at all, that it may buy from private individuals, that it may acquire from municipalities or from any source other than the United States, why should the United States say that it will pay only the actual cost of that, and then have the complication of finding out what was the actual cost to the then owner, 50 years hence? Is it in-

tended to cover the cost of rights of way, etc., acquired by the original permittee?

The original permittee may not acquire anything like all the easements, rights of way, and so forth, that the company operating at the end of 50 years might be using in connection with the plant.

The section is also subject to criticism, in that it is very difficult to understand what property would be taken over by the Government, what property of the permittee would the Government take and lease to some other corporation or individual.

The CHAIRMAN. What do you think about changing it so as to make it read "all the property"?

Mr. GRIFFITH. I would rather have it "all the property" than have it uncertain. The difficulty with these things, Senator, is that when we make one development we will continue to make others as rapidly as the conditions warrant. We intend to go on making developments just as rapidly as the market increases, or as we can create a market for the energy. You can not tell when you shoot energy into a system of transmission lines and get it down to the point of distribution, whether the particular energy that goes into the meter of a customer was generated down on the Cascade Reservation or on private lands. The whole thing is so closely interconnected that it would be difficult indeed to determine how much is absolutely dependent upon the permit granted by the Government and how much is dependent upon developments on private lands or by steam power.

I shall come presently to a suggestion that I think may sound possibly somewhat radical, yet I do not think that that is a question with which the United States Government need concern itself with very seriously. The matter of taking over these plants at the expiration of the term; that is, if the United States should give the notice (assuming that the bill is passed in something like its present form) at the end of 47 years, that it intends to take over this property, and then does not take it over, there is absolutely nothing in the act which says that the permittee, if he desires to continue in business, shall have the right to continue in business upon the terms then prescribed, but the Secretary of the Interior is given the opportunity to lease to some one else, and there is not anything else in this act that requires or authorizes the Secretary of the Interior to first give the option of renewal to the original permittees. That is only a fair and equitable provision that ought to be put in the bill if there is to be any power in the Secretary of the Interior to transfer to some one else.

Senator NORRIS. What would you think of a provision changing this particular clause you are talking about and simply providing that at the end of the term such disposition should be made as should then be provided by law. I presume one of the difficulties in drafting any provision in regard to the taking over of the property at the end of 50 years is that the draftsman would have to call on his imagination, and even then would not know anything definite as to what the conditions would be at the end of 50 years on account of the rapid changes that have been made in the past few years and are likely to occur in the future in the development of electrical energy. I think that we all have to recognize the fact that there are great possibilities and probabilities of great advancement in the development

of electrical energy that may take place, so that the conditions that now exist may be entirely inapplicable.

Mr. GRIFFITH. It may be, Senator, that 50 years from now we will have no transmission lines, and energy will be sent through the air.

Senator NORRIS. Absolutely; and I am inclined to think that something of that kind will develop, and I would like to call your attention, as a practical man, to the improvement that has been going on in our lifetime in the last few years in the storage battery. It may be that the storage battery will solve the whole question, so that transmitting over a wire will be unnecessary 50 years from new.

Mr. GRIFFITH. Will you permit me to refer just a moment to the very fact that we are looking forward in the future to some revolutionary changes in this industry is due to the fact that the history of the development of energy in the past has shown such remarkable changes, remarkable growth. There is not in existence to-day hardly any constituent part of a hydroelectric plant built 25 years ago. Obsolescence is one of the important things to be considered in the valuation of property to-day. It will be one of those reasonable things to be taken into consideration 50 years from now, if the history of the past is any criterion by which to judge the future. When you say the actual cost of rights of way, water rights, lands, and interests therein, and the reasonable value of all other property taken over, excluding all intangible items, the natural presumption is that under the act it would be proper to consider the depreciated value of the property then in existence, and you are losing sight entirely of the obsolescence which will exist and will occur during the next 50 years.

Senator ROBINSON. Does not section 6 give the Secretary, or imply the power on the part of the Secretary, to renew the lease to the original lessee? It specifically provides three different actions that may be taken by the United States, and one of them is the renewal of the lease to the original lessee upon such terms and conditions and for such period as may be authorized under the then existing applicable law, etc. That is in section 6. You are now discussing section 5, as I understand it, but of course the sections must all be construed together.

Mr. GRIFFITH. Yes; but that is not a grant of power to continue the lease in the present lessee, nor is it directed that the Secretary shall first consider the present lessee, or give the present lessee a preference right before considering somebody else.

Senator NORRIS. On the question of cost, which you have been discussing, in section 5 it is provided that the cost of certain things shall be paid. As to whether it should be the value, we will say, instead of the cost—should pay the value of the property—is it not entirely problematical now as to which of those items will be the greater? The cost may be a great deal more than it is worth in 50 years and it may be a good deal less.

Mr. GRIFFITH. If you have the fair value, all of the facts and circumstances that ought to be considered, in the light of the history of the past, will be considered. If it is put in that broad language, so that anything that is properly included may be considered, nothing that is improperly included would be considered, but if we put it down to a hard and fast and certain definite basis of excluding appreciation and intangibles occurring in half a century then we preclude

a consideration of things that would then be admitted by all sides to be fair and reasonable, and entitled to consideration but for the mandatory provisions of the act.

Senator WORKS. Suppose you take that view of it; if things should so come about that the entire system and means of transmitting power should be changed, as you say may happen, and the wires and various other things entirely abandoned as a means of transmitting power, and the owner of the plant should be compelled to substitute something absolutely new, and you allow the Secretary of the Interior to take over the property upon the present value of your operator, in that case, the lessee would lose all the money that it put into the original plant, would he not, and you would be fixing it upon the new one that he had been compelled to substitute. Would that be fair?

Mr. GRIFFITH. No, sir.

Senator WORKS. You were talking just now about fixing it upon the present value, as I understood you.

Mr. GRIFFITH. No; I was talking about putting in the bill a provision that would permit any reviewing authority to determine the value 50 years hence, and consider all those elements that might be properly considered in order to arrive at the fair value of the property. There may be brought about an entirely new way of transmitting energy, and the obsolescence and cost of creating business and all those things should be taken into consideration. It is a duty and the purpose of public-service corporations that their development should keep pace with the demand of the public, and all of these improvements are made for the benefit of the public. The public-service corporation, when it once puts its money into a development, has it fixed there for all time for the service of the people, under regulation. If, because of a defective market or because of any other condition, it can not make enough to take care of the cost of operation and also take care of this enormous item of obsolescence, as has occurred in the past and probably will occur in the future, out of its earnings, then that is a proper charge against the public, because the earnings on that investment are limited by regulation.

Senator WORKS. Then if you assume that the operator has been repaid out of his receipts for all of those years that have gone before, I think your position would protect the operator, but otherwise it would not.

Mr. GRIFFITH. And if 50 years from now, upon the consideration of the fair value of the property at that time, it were found by the reviewing body that the obsolescence had been taken care of out of the earnings above a reasonable return on the investment, it would not be taken into consideration in fixing the value.

Senator NORRIS. At least it ought not.

Mr. GRIFFITH. It ought not and would not.

Senator NORRIS. The right kind of law, that would provide for its valuation at that time, of course would give consideration to that, but now I would like to ask you, right on that point, do you not think it would be the duty of a regulating body to take that into consideration in the fixing of rates? For instance, if some new invention would make wires obsolete, and they would have to make some improvement and throw away a lot of stuff that had become

plant and that was once very valuable, the body regulating the rates would give due consideration to that and permit them to charge such a rate as would enable them to get a return for the loss of that property that was really destroyed.

Mr. GRIFFITH. That is quite true, and in all probability that will develop as a fixed principle of regulation.

Senator NORRIS. Do they not do that now? I think in many instances they do it. And having done that, when you come to value the property, of course having once had their return for that, they ought not to be allowed to have it again in fixing the valuation of the property.

Senator WORKS. No such conditions as those exist at the present time. Nearly all of these improvements, or extensions at least, that are made are made out of borrowed capital or borrowed money.

Mr. GRIFFITH. To the extent of probably 75 per cent—70 to 75 per cent of the cost.

Senator WORKS. If it should appear now that with the bonds outstanding against the company for those older improvements the company should be compelled to change its system entirely and issue bonds for the purpose, then the fixing of your value as at the present time would not permit the operator to be paid for the borrowed money to build that plant which has not been returned by the receipts of the company at all?

Mr. GRIFFITH. No; it has not been in most instances, Senator, and I think I may say that certainly in the West, in the Pacific coast cities and States, no electric company to-day has earned enough above a reasonable return upon its invested capital to cover the obsolescence and the depreciation that has occurred if the company is 20 or 25 years old.

Senator NORRIS. Depreciation of the plant is one of the common items taken into consideration in valuing the property, as I understand it.

Senator WORKS. But I was considering what had been suggested, that you might at some time have to put in an absolutely new system to meet the situation, and then it seems to me—although you are probably better able to protect your company that I am—that a company like yours would not be protected by the Government paying the present value of the property.

Mr. GRIFFITH. Oh, I perhaps have not made myself clear to you. This element of obsolescence, Senator, ought to be considered if it has not been covered by the earnings of the company. In that case it is a part of the fair value; it is a part of the creation of the business.

Senator NORRIS. It is not necessarily, it seems to me, a part of the fair value, but it would be a part of the cost. There is no doubt about that. I could conceive a condition where the fair value of the property would be much less than its actual cost, and it may be that the actual value may be a great deal greater than the cost.

Mr. GRIFFITH. Yes, Senator; but actual cost as defined or confined in this bill is limited. A water right does not become obsolete, nor does a piece of land become obsolete. But a piece of machinery does.

Senator NORRIS. Well, the use of a right of way might become obsolete.

Mr. GRIFFITH. But the land would have its value as land.

Mr. LINCOLN. Not necessarily so, because fuel is continually ri in price and some of our experts can see the end of our fuel bed a limited time.

Senator ROBINSON. You do not see anything of that sort, do y the end of the fuel beds?

Mr. LINCOLN. Well, you must remember this, that fuel once bu is gone forever. On the other hand, the water power, so long remains undeveloped, is gone forever. That is the difference bet water and fuel as a source of power. As long as these water po remain undeveloped you are throwing away those natural and replenishable resources of coal and other fuels.

Senator ROBINSON. You are not utilizing them. It is not thro them away.

Mr. LINCOLN. That power is gone. It is potentially there, a is gone.

Senator ROBINSON. Then you are unable to state, upon your in gations, which, on the whole, is the more expensive—hydroel or steam power?

Mr. LINCOLN. It depends entirely upon conditions. If you me the conditions I could say.

Senator ROBINSON. How is it you know there is very little d ence, then?

Mr. LINCOLN. Because in the cases which I have studied I found that to be true.

Senator ROBINSON. There is not a great deal of difference i specific cases you have studied?

Mr. LINCOLN. No.

Senator ROBINSON. Do you mean to say in all the cases you examined it happens there is very little difference in cost of h electric power and steam power?

Mr. LINCOLN. Yes.

Senator ROBINSON. And yet you can not say which one is l than the other?

Mr. LINCOLN. No.

Senator ROBINSON. That is all.

Senator STERLING. Has not the cost of coal a great deal to d the development of steam power?

Mr. LINCOLN. Very largely. The cost of fuel and first c hydroelectric development are two controlling factors.

Senator NORRIS. If the first cost of hydroelectric developmen very great and the operating cost very small, you might th justified in putting in a hydroelectric plant where for a num years, at least, the operation through coal would be cheaper?

Mr. LINCOLN. Oh, yes, sir.

Senator NORRIS. If it was some business that was going to l manent, from its very nature, and would last practically fore

Mr. LINCOLN. Yes; you would feel justified in putting in a electric plant, because there is a general tendency for fuel to value.

Senator NORRIS. Then if the operating cost of the hydro plant were small that would be one of the great determining to put it in if it was for some work that was permanent. I stance, if you were going to put in a system of electric lights city of Washington here and were going to develop Great F

gradually true.

There have been engineers who
development, with which you
a plant right near St. Louis on
supply power cheaper to the city
by transmitting power there from
very good foundation for that

How does the cost of the production of power
in the city of New York, compare?
question that is pretty hard to answer.
years at the Niagara Falls Power
with some authority upon the conditions
was first resolved to supply the city of
Power Co., that one of the engineers
before you advised installing a steam
for the purpose of assisting the Niagara
and the Niagara Falls Power Co.'s plant
of the load and the steam plant to take the
there is no question but that a combina-
worked out and make the total over all cost
the cost of power from the Niagara Falls

a case where there is a great variation

unately is more or less the case with

is the comparison, in the case of the city
the city, taking all characters of conditions.
Falls or from steam?

Mr. LINCOLN. Probably in the case of the city of Buffalo, on account of the comparatively short distance from transmission, the supply from Niagara Falls is the cheaper.

Senator NORRIS. Can you give us the exact figures, taking the specific case you are speaking of, of Niagara Falls power delivered at Buffalo, with a continuous and steady amount for 24 hours, of how much coal would have to cost per ton to develop the same energy at the same cost.

Mr. LINCOLN. That is a hard question to answer.

Senator NORRIS. If you could answer it, you would give us something that is definite.

Mr. LINCOLN. I believe that with coal costing, as it does, about $2.50 a ton in Buffalo—Pennsylvania coal—and the Buffalo load factor being as it is, that power can be supplied from Niagara Falls cheaper than you can develop it with coal in Buffalo.

Senator NORRIS. That does not quite answer my question. I gave you a more favorable water-power condition or coal condition. I said take the Niagara Falls power delivered at Buffalo, with a steady load factor, one that is the same for the whole 24 hours.

Mr. LINCOLN. Oh, one that is the same for 24 hours?

Senator NORRIS. Yes. How much would that equal in coal per ton at Buffalo?

Mr. LINCOLN. If you give me that condition, I would say that coal would have to be very cheap before you could compete. But that is not the condition you have. You would always have to meet a variable-load factor and would have to meet the peak-load factor and would have to put in apparatus enough to meet the maximum load. And that is what determines the capital cost.

Senator NORRIS. Can you tell us in Buffalo when they have the peak?

Mr. LINCOLN. About 5 o'clock in the evening of the day before Christmas—either two or three days before Christmas.

Senator NORRIS. Well, I do not know whether you understand my question or whether you are making fun of me.

Mr. LINCOLN. No; I beg your pardon; I am not. I did not intend to.

Senator NORRIS (continuing). But I have asked you a very serious question which you have not answered. At least, I think it is. There is a peak load every 24 hours?

Mr. LINCOLN. Yes.

Senator NORRIS. I want to know, in Buffalo, when, if you know, that occurs?

Mr. LINCOLN. That occurs about 5 o'clock in the evening during the wintertime and, I think, about 7 or 8 o'clock in the evening during the summertime.

Senator NORRIS. When is the lowest time?

Mr. LINCOLN. In the summer.

Senator NORRIS. I mean in the 24 hours?

Mr. LINCOLN. Oh, in the 24 hours it is about 2 or 3 o'clock in the morning.

Senator NORRIS. What is the difference between that and the peak load?

Mr. LINCOLN. The average load for the year, if you take the peak load for the year and take a steady demand equal to that through

the year and then compare that with the actual kilowatt hours, you would have a load factor of about 30 per cent, possibly; that is to say, you would only supply about 25 to 30 per cent of what the peak, extended for the whole year, would take.

Senator NORRIS. Now, I want to ask you, as an engineer, if it is not practicable for a company like the one you are talking about at Buffalo, where the peak load is very high and where they must necessarily have sufficient energy to meet the peak-load conditions, to sell electricity during other portions of the 24 hours, when they do not come anywhere near the peak load, at a very low rate?

Mr. LINCOLN. Yes, sir.

Senator NORRIS. And thus develop manufactures and other things that use power, that could just as well use it at those hours of the day, and, in the end, use the entire load?

Mr. LINCOLN. I may say, Senator, that electrical engineers and others interested in electrical industries have been looking for that kind of a load for the last 20 years and they have done their utmost to develop that kind of a load; I mean a load that pulls on the station at other times than the peak, so as to reduce the capital cost.

Senator NORRIS. Is it not true that in a great many places they have schedules by which they will sell power during certain hours of the day at one rate——

Mr. LINCOLN. Yes, sir.

Senator NORRIS (continuing). And at other hours of the day at a different rate?

Mr. LINCOLN. Yes, sir.

Senator NORRIS. Depending on the peak load?

Mr. LINCOLN. Depending on the peak load, yes; and that is very generally true—that they will consent to make a cheaper rate when the load demand on the power station is at the minimum. They can make extremely low rates. That is done in the interest of developing a more uniform load curve.

Senator NORRIS. For instance, in the city of Washington, where there is a peak load about 4 or 5 o'clock in the afternoon in the wintertime, would it not be a practical proposition, in case we had a large supply of energy furnished by water power, to provide all over the city that the men who wanted to charge their storage batteries for their automobiles could get a rate that would be surprisingly low if charged during certain hours when the energy was not necessary?

Mr. LINCOLN. There is no question of that, Senator.

Senator NORRIS. And this equalizes, to a certain extent, the use of a larger quantity of power?

Mr. LINCOLN. Yes; that is true. And I think you will find, if you examine the schedules of practically any city that is up to date, that that effort is being made.

Senator ROBINSON. I would like to ask you what is the total cost per kilowatt hour of power produced at Niagara?

Mr. LINCOLN. Per kilowatt hour?

Senator ROBINSON. Well, total cost?

Mr. LINCOLN. The selling price of the Niagara energy is approximately $20 per kilowatt per year. Now, when you come to reduce that to kilowatt hours it depends on the load factor which is taken. But it always comes at considerably less than 1 cent per kilowatt

hour and probably would come much closer to one-quarter of a cent per kilowatt hour, but I can not give the exact figures.

Senator NORRIS. Do you know what the people pay there for electricity in their homes.

Mr. LINCOLN. They pay about the same rates that they do elsewhere, about 8 or 10 cents per kilowatt hour, I think. But bear in mind that the distribution charges to the individual, the small users, add to the cost to them very considerably.

Senator NORRIS. Oh, yes; there is no doubt about that.

Senator STERLING. Have you made any estimate at all, Mr. Lincoln, based on the price of coal such as would be consumed in the production of steam power, and compared the differences between the cost of producing power by steam and by water at a given price for coal?

Mr. LINCOLN. I have made a good many investigations in specific cases.

Senator STERLING. Yes.

Mr. LINCOLN. Again, you see, your question is of a general nature, and before you can answer that on any specific case you would have to let me have the cost of coal and the cost of developing the water power together; and, what is very important, is the shape of the load curve.

Senator ROBINSON. When I asked you about the total cost of water power at Niagara I did not mean the cost to the consumer, but I meant the total cost of production, generation, and operation, if you knew. You gave me the selling price.

Mr. LINCOLN. I gave you the selling price; yes.

Senator ROBINSON. Which differs from the cost, unless you take it as the cost to the consumer. We were discussing, you know, the cost of generating and distributing these respective powers—water power and hydroeleetric power—and when I asked you about the cost of hydroelectric power there I meant the cost, of course, to produce and distribut it, not the selling price.

Mr. LINCOLN. I can not tell you. I do not know what the costs of developing are at Niagara. I can not answer that.

Senator PITTMAN. Mr. Lincoln, do you know anything about the cost of electric power in the Western States?

Mr. LINCOLN. Yes; something.

Senator PITTMAN. You realize that this bill more particularly affects the Western States—the public-land States?

Mr. LINCOLN. Yes.

Senator PITTMAN. In fact, this bill has nothing to do with anything except the public lands, so to speak. There is another bill that affects navigable rivers, but this bill affects directly public-land States. It affects only the power that is generated on public lands. Consequently the conditions which we must consider are the conditions in those public-land States.

Now, then, the cost of producing electricity by steam in those Western States would largely depend upon the fuel and cost of labor, would it not?

Mr. LINCOLN. Yes; certainly.

Senator PITTMAN. And, of course, the cost of labor would apply to one character of power as well as to the other. And therefore we come down to the cost of fuel. Do you know what the comparative

cost of fuel in the Western States is in reference to the cost in the Eastern States?

Mr. LINCOLN. It is always higher; much higher.

Senator PITTMAN. Much higher?

Mr. LINCOLN. Yes. And, Senator, the availability of water powers is greater in the Western States.

Senator PITTMAN. Then in that case the cost of producing electricity by water power and by steam power would widen in proportion to the increased cost of fuel?

Mr. LINCOLN. Absolutely; yes, sir.

Senator PITTMAN. Then is it not your opinion that in the Western States, the public-land States, where fuel is high, that very probably hydroelectric power would be cheaper?

Mr. LINCOLN. In some cases; yes.

Senator PITTMAN. Cheaper to produce?

Mr. LINCOLN. In some cases. In many cases it would be.

Senator PITTMAN. Do you not conceive that in nearly all of them it would be?

Mr. LINCOLN. Not necessarily; no.

Senator PITTMAN. Right now does there occur to your mind any case where it would not be? Take San Francisco, Los Angeles, or any of the big cities of the West.

Mr. LINCOLN. Those are all supplied with hydroelectric power now?

Senator PITTMAN. Yes.

Mr. LINCOLN. But, for instance, in the case of San Francisco they are bringing power in from a distance of 150 miles, or thereabout.

Senator PITTMAN. That is practicable, is it not?

Mr. LINCOLN. Certainly; they are doing it. They have gone out that distance because they could get cheaper water powers.

Senator PITTMAN. Do you think steam power could compete with that of water power?

Mr. LINCOLN. No; not to any extent; although it is a fact that fuel-burning power has been installed in San Francisco for the purpose of taking some of the higher peaks of their load.

Senator PITTMAN. I mean in competition, now. I am speaking of competition. I understand water power may be installed and then the surplus load has got to be supplied by some other character of power. But do you think steam power could enter into direct competition with the hydroelectric power furnished in San Francisco?

Mr. LINCOLN. Probably not.

Senator PITTMAN. Do you think it could in Los Angeles?

Mr. LINCOLN. To a certain extent. They are taking some of their power in Los Angeles from steam power now. They have a large station on the beach of the Pacific Ocean, there, at Redondo, supplying a considerable part of the power for the city of Los Angeles.

Senator PITTMAN. Yes; for their surplus demands.

Mr. LINCOLN. It is supplying the peak demands.

Senator PITTMAN. Do you believe, however, when Los Angeles ... its full power developed by its water power from Owens Valley ... steam can compete with that power?

Mr. LINCOLN. Probably not; no. Unquestionably they can not compete; that is, for a load factor of anything like 100 per cent. But there is always an opportunity for steam stations to take the

peak part of the load. The demands for power during the day and during the year are extremely variable.

Senator PITTMAN. Would there be any demand for steam power to take the peak load if all the power created by this water was used?

Mr. LINCOLN. Not at first, because the amount of power which is provided for at first, when they get this Owens Valley plant going, will more than take care of the maximum load, but as the load grows and comes to a point where there is more load than the water power can take care of, then the matter of developing some power by steam will come in.

Senator PITTMAN. Now we come back again to the lack of competition. In other words, you have run out of water power. But I am now speaking of competition. If there was always a continuous development of water power to meet the demand, and the demand was always sufficient to take up the supply, it would take care of the whole peak load then, and there would not be any necessity for any other character of power, would there?

Mr. LINCOLN. Your question is whether steam could compete with water?

Senator PITTMAN. If it could in such a case compete.

Mr. LINCOLN. That again comes to the question of how much your additional water power is going to cost you to develop. If that comes below—well, I should say for Los Angeles, if it comes below $150 per kilowatt for the additional water power, as investment or capital costs, that steam power probably could not compete.

Senator PITTMAN. You are now speaking of probabilities; and as an engineer I asked you, in the first place, if you knew the conditions existing there.

Now, do you know the conditions existing in the West in regard to the cost of production of water power in various localities?

Mr. LINCOLN. I am not familiar with all of the details; no.

Senator PITTMAN. Do you know the cost of coal in Los Angeles?

Mr. LINCOLN. No; not exactly. I know it is pretty high. Oil is rather low in Los Angeles, but coal is high.

Senator PITTMAN. Do you know the cost of fuel in San Francisco?

Mr. LINCOLN. The same applies there. Oil is low and coal is rather high.

Senator PITTMAN. How about Denver and Salt Lake?

Mr. LINCOLN. At Denver it is not very high. They have coal beds not very far away from the city of Denver.

Senator PITTMAN. It is an economic proposition in the case of water power in Denver, Ogden, or Salt Lake?

Mr. LINCOLN. Yes, sir.

Senator PITTMAN. Do you think, under the conditions I have heretofore named of a complete demand for all the power and a complete use of all the power supplied, that steam could compete with that water power that is being furnished in those cities?

Mr. LINCOLN. Probably the cost of water power in the city of Denver, as it is supplied to-day, is cheaper than could be supplied by steam.

Senator PITTMAN. Yes.

Mr. LINCOLN. But if Denver had to go very much farther away for its water power, the development of water power would inherently be more expensive then than it is now, and I can very readily

imagine a condition where water power could not compete with steam.

Senator PITTMAN. Say if they had to go 400 miles?

Mr. LINCOLN. One hundred and fifty miles.

Senator PITTMAN. I can imagine that if it had to go 500 miles for the water power and only had to go 20 miles for coal, then that might be true. But I am talking of the real conditions now.

Mr. LINCOLN. One hundred and fifty miles is a good long ways to bring water power.

Senator PITTMAN. We bring it for 150 miles into Nevada there and supply it very cheaply, more cheaply than could possibly be supplied by any other form of power. They have run all other forms of power out of existence. And we carry it for 150 miles; that water power is created in the Cascade Mountains under the most expensive conditions of nearly any hydroelectric power development we know of.

Senator ROBINSON. As you know, in California where they have the cheapest fuel, they have a greater hydroelectric development than in any other part of the country, which, I take it, partly answers all he has stated as to the cost of depending on the price of fuel.

Senator PITTMAN. Yes. Those same conditions exactly that make the cost of instituting hydroelectric power high are the conditions that, as a general thing, make fuel high. In other words, there is a proportion. Here in the East, where coal is cheap and labor is cheap, it is not comparatively cheap to institute hydroelectric power; while, out in the public-land States, where freight is high, you understand, and where labor is high, where the conditions of climate and weather and water entail a big expense upon the hydroelectric powers it also entails a big expense upon fuel. Those proportions are general are they not?

Mr. LINCOLN. That does not necessarily follow. You see, in the Western States it is rough country, and the heads which are available in many of the water-power developments are large, and it does not take a very large amount of water or a very expensive hydroelectric development to produce the power; that is, where the water heads are high the expense of development is usually low.

Senator PITTMAN. Then the increased expense of developing hydroelectric power in the public-land States is not so much greater, under your explanation, than in the Eastern States by reason of that.

Now, then, how about the transportation of other characters of fuel?

Mr. LINCOLN. Well, the conditions in the Western States unquestionably are favorable to the development of water powers; and that is the reason they have been so extensively developed by the Western States.

Senator PITTMAN. You know, do you not, from your examinations as an expert that transportation charges through the West are much higher than they are through the East?

Mr. LINCOLN. Certainly.

Senator PITTMAN. Do you know what the transportation charge is for coal from the coal mines in Wyoming to Nevada, for instance?

Mr. LINCOLN. No; I do not.

Senator PITTMAN. You you be surprised to know that it is $8 a ton?

Mr. LINCOLN. No.

Senator PITTMAN. I think that is correct, sir. If that were the fact, that would make it almost prohibitive, would it not, to generate electricity with steam in competition with any kind of water power we might have?

Mr. LINCOLN. That is the reason there is such a large development of water power through the West.

Senator PITTMAN. This bill is only dealing with the West, you understand. This bill we are considering is only dealing with the public-land States, because it is only governing hydroelectric-power development created upon the public lands. Otherwise this committee would have nothing to do with it—if it was on private lands within the States. That is the reason I am drawing your attention particularly to the Western conditions.

Mr. LINCOLN. I am perfectly willing to admit that the western conditions are such as to make it very much harder for steam to compete with water than they are in the East. There is no question about that.

Senator PITTMAN. As a matter of fact, steam is being driven out of competition by water power through the West, is it not?

Mr. LINCOLN. Well I think you can put it the other way, that practically all of the power which is being developed in the West is being developed by water power.

Senator PITTMAN. Have not your examinations given you the information that there are cities which have had electric power created by steam and where they have changed it now into hydroelectric power?

Mr. LINCOLN. That is true in some cases.

Senator PITTMAN. I believe that is all.

Mr. LINCOLN. I have a pamphlet here which was prepared in 1911 by the American Institute of Electrical Engineers, in which this question of competition of water power and steam power is dealt with, which I will submit in the form of a brief supplemental statement.

(The paper referred to is as follows:)

SUPPLEMENTAL STATEMENT OF MR. PAUL M. LINCOLN, PRESIDENT OF THE AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS, APPEARING BEFORE THE PUBLIC LANDS COMMITTEE OF THE SENATE, DECEMBER 16, 1914.

Supplementing the testimony which was given by me at the hearing to-day, I would call attention to the considerable interest which was aroused in the committee as to the comparative costs of water power and steam generating power for various conditions. As bearing upon this question permit me to submit to you the following quotation which is taken from a statement made by the public-policy committee of the American Institute of Electrical Engineers to the United States National Waterways Commission on November 21, 1911. This statement relates to water-power development in general, and the quotation which follows is simply that part of this statement which bears upon the question of relative cost.

CLOSE COMPETITION BETWEEN WATER POWER AND STEAM POWER.

The belief among certain classes of the public that water powers yield excessive or disproportionate profits springs primarily from two causes—the conception that the water itself is the power and that the expenses of operation of a water power are small, while the company's income is large.

While certainly the power could not be developed without the water, the water on its part can deliver no power except by means of the dam, the power

house, and its appurtenances. It is difficult for the public to regard these once built as involving continuing expense, but they do. This expense is comparable in amount with the cost of coal in a steam station and is the return due to the capital invested. It takes the form of interest, sinking-fund expenditures, depreciation, and taxes. The invested capital in a water power is so much greater than the public realizes that with interest charges at not more than 5 or 6 per cent in a majority of cases from 70 to 80 per cent of a water-power company's income is absorbed.

This return to capital is not profit. Without the prospect of it capital can not be secured.

Of a water power once built and after its expected market has been developed, the operating expenses, exclusive of the returns to capital, are seen by the public to be small, which they are, in a majority of cases, absorbing only from 15 to 20 per cent of a company's income. The remainder, however, that is left for profit after capital and operating charges is paid, are usually not large and certainly not excessive, especially when there is always risk of damage from floods, lightning, failure of expected market to develop, and such uncertainties of operation as the art of electrical engineering has not yet been able completely to remove.

Practically all water powers come to birth or not on the answer to the question, "What is steam power in the territory costing?" and they can only live when they deliver power at a substantially lower cost. At the same cost they remain unborn.

Besides the cost of power the relative amount of investment is a determining factor. While at present a steam electric plant can be built for $75 per horsepower, the cost of a hydroelectric plant varies from two to four times that amount. Part of this difference is because the steam plant can be built near the center of its market, while the water power is almost invariably at a distance.

With the capital required for a water power so much greater, the tendency is to build a steam plant, even if the power it delivers is not as cheap as that of a water power. If it can be shown that water power can be delivered for, say, $25 per horsepower per year, but that steam power can be produced for, say, $27, the water-power plant will not be built and the steam power will. If, however, the water power could be delivered for $24, the difference might turn the tide in favor of the hydroelectric investment.

It is because of the great effect of slight differences in the cost of water power upon the determination of the question, Shall water or steam power be developed in a given community? that even light burdens in the form of taxation, charges for sinking fund to wipe out the investment at the end of a limited period, or limitations as to tenure, even though not immediately onerous, loom so large in settling it.

Attention is often called to the increasing cost of coal, with an implication that the cost of steam power will rise, permitting hydroelectric companies to raise their rates and exact undue profits. The implication is not correct. It is true that the cost of coal is rising, but it is also true that steam engines and boilers are constantly being improved in efficiency, and that the art of producing power from steam is progressing at a rate so much more rapid than that at which the price of coal is rising that the cost of steam power is continually falling. Should a limit to this fall be reached, which is not yet in sight, gas and oil engines are making such constant reductions in the cost of power that there is no probability that water powers will be free from the controlling competition of other kinds of prime movers. It is safe to say that extortionate rates in water power are highly improbable, even if the principle of rate regulation by commission were not applicable to hydroelectric companies.

(Thereupon, at 12.45 o'clock p. m., the committee adjourned until to-morrow, Thursday, December 17, 1914, at 10 o'clock a. m.)

WATER-POWER BILL.

THURSDAY, DECEMBER 17, 1914.

UNITED STATES SENATE,
COMMITTEE ON PUBLIC LANDS,
Washington, D. C.

The committee met at 10 o'clock a. m., Hon. Henry L. Myers (chairman) presiding.

Present: Senators Thomas, Robinson, Chamberlain, Smoot, Clark, Works, Norris, and Sterling.

STATEMENT OF MR. W. V. N. POWELSON, OF NEW YORK CITY, A CONSULTING ENGINEER.

The CHAIRMAN. Give your name and business to the stenographer and state what interest in the matter you represent.

Mr. POWELSON. My name is W. V. N. Powelson and I now live in New York. I am here because of a desire to promote the public welfare. I am not here as the representative of any power company, nor do I represent anybody but myself.

Senator CLARK. What is your business, Mr. Powelson?

Mr. POWELSON. A consulting engineer.

I have been devoting a great deal of attention in the last seven years to water powers and to this general question which is before your committee, and therefore I feel I am in a position to speak with personal knowledge on all the details of the business, including the raising of money for water-power enterprises, the construction of the works, and the operation of such properties to supply the public.

I was very much interested yesterday in listening to the testimony of a gentleman who came before the committee apparently with the same desire that I have expressed—that is, he came to represent the public interest. I refer to Mr. Pinchot.

In the course of Mr. Pinchot's testimony he referred to the National Conservation Association, and, as I understood his testimony, he stated that the views which he expressed were the views of the association. Now, I am a member of the association, and I was a delegate to and attended the last convention in Washington as one of the appointees of the governor of the State of Tennessee. While it is probably the fact, and I am quite willing to concede that it is the fact, that a majority of the present members of that association would follow Mr. Pinchot in any policy that he might think it wise to advocate, I wish also to call attention to the fact that there is nothing in the qualifications for membership in that association which would

require a member to have any previous knowledge of the subject of water powers, or to be by training in a position to reach correct conclusions from such arguments as might be presented in a discussion. The majority would, in my opinion, follow Mr. Pinchot because of their belief in his high purpose, but not from a conviction, independently formed, that his policies are truly in the public interest. I do think that the men who belong to the association and who broadly understand the question of water powers—and I refer to the men who understand the business from the first location of the site, through the raising of the money, the construction of the works, the marketing of the power, and the earning of returns under proper regulation in the public interest and the ultimate return of the principal to the owners—are in accord with the views that were expressed yesterday by Mr. Pinchot.

I should not like the committee to understand that I am here making an attack upon Mr. Pinchot, because I am not. I have great respect for the motives which I think actuate Mr. Pinchot in coming before this committee and in all the other work he has done in the furtherance of what he considers the interest of the people in water-power matters. But at the same time I do wish to say that Mr. Pinchot does not speak for me on this subject.

At the last convention of the conservation association I presented a paper and that paper is printed in the record of the association. Now, I think the views that I expressed in that printed paper are in substantial accord with the views of the men who understand water powers and their relation to the public welfare. It is not my purpose to read that paper to you now, but with your permission, I would like to present it to the committee and ask, if there is no objection, that it may form a part of the record of your proceedings.

The CHAIRMAN. That may be done, Mr. Powelson.

Mr. POWELSON. Thank you, sir.

Senator SMOOT. Make it a part of your remarks.

(The paper referred to will be found at the conclusion of Mr. Powelson's remarks.)

Mr. POWELSON. If it seems necessary that I should refer to Mr. Pinchot in a personal way, it is only because he and I differ and, naturally, if I wish to have you believe that the views I hold are better for the public interest than the views he expressed, it may be necessary to point out in one or two respects why I think it is probable that they are.

Now, Mr. Pinchot has been in the water-power fight, so-called, for a very long time. I do not attempt to speak of what the conditions were at the time Mr. Pinchot began this fight, but I think he has been in the fight so long and his perspective as to the conditions as they exist to-day has been so distorted, that he is not able on this question to give sound advice in the public interest. And I say that with the highest respect for his purpose, for I know that his heart is in the right place.

As an evidence of his partisan feeling, I call attention to the answer that Mr. Pinchot gave to one of the members of the committee in his testimony yesterday. He was asked whether a certain bill before this committee met with his approval. He said that it did not, and he advanced as his reason that the bill embodied the propositions for which, based upon his own experience, the so-called water-power

men, had been contending for a number of years, and, as I remember his testimony, he dismissed the subject practically with that answer. Now, it seems to me that this question is entirely too big, it is too complicated, to be approached from a partisan standpoint. It does not seem to be that it matters much that I champion certain views or that Mr. Pinchot champions certain views, both of us claiming that we are acting in the public welfare, or that so-called water power men do. It seems to me that the only thing that matters is whether the things that may be suggested are really in the public interest.

It seems to me that in framing legislation there are three main purposes which the legislation should seek to accomplish, and with your permission I will state what these purposes seem to me to be:

First. The delivery of power to the public on the lowest possible terms.

Second. The delivery of power under conditions that insure the greatest reliability of the service.

Third. The delivery of power in the greatest volume that the market can absorb; that is, cheap power, good power, and all the power that anyone can use.

Now, it seems to me that if the legislation accomplishes those three main purposes it has done all that the public interest could expect or require. And I therefore urge that the legislation should include those things which are essential to the three purposes named and that there should be excluded from the bill everything not essential to at least one of these purposes. If we accept that statement of principle as the measure by which we shall estimate this legislation, then I think a careful reading of section 5 of the bill would disclose that it was defective; and, with your permission, I will try to point out in what respect it is defective.

Section 5 grants authority to the Government to take over the properties which are dependent in whole or in part for their usefulness on the continuance of the lease therein provided for. I think that is entirely proper, and it is quite essential; but I wish to call attention to the fact that there is no obligation on the part of the Government to take over all the property the usefulness or value of which to the grantee would be impaired by the loss of the lease.

If the bill does not state specifically what the Government is obliged to take over, it will add substantially to the cost of the service to the consumer, it will impair the reliability of the service, and it will restrict the volume of power that is available for public use. It will therefore tend to defeat the three main purposes of the legislation.

The reasons for that lie in the necessity for amortizing, during the fixed term of the lease, the property the value of which may be destroyed or impaired by the termination of the lease, or by the failure of the Government to take it over. Therefore it seems to me that this section should be amended so as to provide that on the expiration of the fixed period of the lease the grantee should have the right to continue to operate the property until such time as the Government or its nominee should take it over and pay for all the property which at that time was dependent for its full value or usefulness upon the continuance of the lease. If the bill does not do this, and if there is any uncertainty about the course of action of the Government in this respect, investors are bound to require that the property not specified to be taken over shall be amortized during the period of the lease,

and if they have any uncertainty about being permitted to amortize it I think it would add substantial difficulties to raising the necessary money.

In this connection I would like to say that last January I came to Washington to see the Secretary of the Interior. I understood then his views were that if the Government gave a grant for 50 years to operate a water power that at the end of the time the works should become the property of the Government as a consideration for the use of the site and lands. I told the Secretary I thought he was wrong in believing that this proposition was in the public interest, and asked whether I might not undertake further correspondence with him to lay before him my views upon those points. In accordance with the permission which he gave me, I wrote him a short letter, which I would like to read, inclosing a memorandum which I will not read, but which I would like to put before the committee and ask that it be included in the record as a part of my remarks.

(The memorandum referred to will be found at the conclusion of Mr. Powelson's remarks.)

Under date of January 23, 1914, I addressed a letter to Hon. Franklin K. Lane, Washington, D. C., as follows:

DEAR SIR: The consideration with which my previous suggestions have been received leads me to believe that further carefully thought out suggestions pertinent to the water-power question will not be unwelcome to you.

I therefore venture to inclose a copy of an analysis which I have prepared, entitled "The Limited Tenure of Water Power Grants," and to express the hope that you will find the time to carefully read it, and that unless you are able to detect errors of importance in its assumptions and reasoning, you will adopt the conclusions therein reached, as follows:

(*a*) That the limited tenure policy as applied to waters does not offer a satisfactory solution of the question that confronts us.

(Interrupting his reading of the letter at this point, Mr. Powelson made the following remark:)

I would like to say, parenthetically at this time, that the limited tenure we had under discussion at that time was the total loss of all the property—the confiscation by the Government of all the property at the end of the lease. As the bill is drawn now that question does not arise in its entirety, but it does arise in respect to that portion of the property which it is not provided in the bill shall be taken over and paid for by the Government on termination of the lease.

Then the letter goes on:

(*b*) That it is wrong in principle.

(*c*) That, if adhered to, it will, because of long years of injustice to the consumers of power, lead inevitably and by the petition of the consumers themselves to unlimited tenure under Government regulation.

(*d*) That the public interest requires under effective governmental regulation, either an unlimited tenure or a long term fixed tenure indeterminate thereafter at the option of the Government, the entire property and business to be taken and paid for by the Government upon termination of the grant.

I think that the present views of the Secretary of the Interior, as I know them, are not the same as they were last January. I, of course, shall not attempt to speak for the Secretary, but I believe that the Secretary is in accord with the conclusions as stated in the letter which I have just read. I think that he feels that the economics of this question require that the bill should state in terms that when the grant is terminated the grantee shall be paid for the

property the value of which to him would be impaired if the lease were lost.

I did not come before the committee to make an argument on all the features of the bill. I regard the features to which I have spoken as very important, and it was my purpose to confine my remarks, unless there are questions, to these points. The memorandum accompanying this letter to the Secretary which I have just read showed under certain conditions that if none of the property of the grantee were taken over by the Government at the end of the grant the probabilities were that it would add about $12 per horsepower per annum to the charges that would have to be made to the consumer in order to let the grantee out whole. Now, if the grantee through uncertainty as to what the Government would take over and pay for should be permitted to amortize part of his property, and then if at the expiration of his lease all his property was bought by the Government because it was found to be useful to the Government, he would be that much ahead—he would get more out of the business than he ought to get out of it. It is not in the public interest that such a contingency should arise.

Senator STERLING. Would not the fact that in the bill, in section 5, payment to the lessee is provided for in case the Government takes the plant over do away, to a great extent, with the objection in regard to the limitation upon the term?

Mr. POWELSON. Yes. In my view there should be a definite term of a substantial period—50 years. Then I think there is no objection, so far as I can see, in the public interest or in the interest of the water power people, to taking that grant away then, at the end of 50 years, provided they are reimbursed for the value of the property and the Government assumes the power contracts that have been made under public regulation. If they are going to lose any part of the property, I think the public-service commissions, in fixing rates, are bound to take that into consideration, and they are bound to add that to the cost to the company to do business and in consequence to the price to the public.

But I may say, Senator, that I think that many of the so-called water power people—I have no brief to represent them, and do not, but I naturally know a number of them, and I know a number of the progressive and more able of the water power men—recognize that the best interests of the power people are indisolubly bound up with the best interests of the public. They fully realize that in a permanent business running over 50 years their investments are a great deal safer if the public interest is well taken care of, and for this reason they are in favor of public regulation of their rates, service, and facilities.

Senator STERLING. What would you think of this as a basis for settlement with the lessee, as provided in the bill: Paying first the actual cost of the rights of way, water rights, lands, and interest therein purchased, and then the reasonable value of all other property taken over?

Mr. POWELSON. Well, "all other property taken over" leaves it optional with somebody as to what properties shall be taken over, and that is the point to which I have been speaking. I have not come to discuss as to whether they should pay the actual value or fair value or some other sort of value. What I want to point out is that

it should be mandatory on the Government to take over "the property the usefulness of which or the value of which will be impaired by the loss of the lease," and I take it that it is not only fair to the investors that such a provision should be incorporated in the bill. but it is also in the public interest.

Senator CLARK. It is your view that it would be advantageous to insert in the bill in connection with that that in case the Government did not exercise its option the lease should be continued?

Mr. POWELSON. That it should be continued.

Senator CLARK. In other words, you would not want a hiatus?

Mr. POWELSON. Oh, no. I think, Senator, the public interest will be injured if there is a chance of that hiatus, because if the Government does not take over all the property, or in the event it does not enter into a new lease with the original grantee, the property is gone at the end of the fixed term, so far as the investor is concerned.

The CHAIRMAN. I will say here that Secretary Lane has come to the conclusion that the bill should be amended in that respect, and I have always been of that opinion myself.

Mr. POWELSON. I am very glad to know that.

The CHAIRMAN. And I shall urge that it be so amended.

Mr. POWELSON. I am very glad to hear that, because it seems to me it is in the public interest.

Now, I shall be glad to answer any questions that the committee may wish to ask me about any phase of this business.

The CHAIRMAN. Is that all of your statement, then, except to submit to questions?

Mr. POWELSON. Yes, sir. I have not come to make any extended argument upon the bill.

The CHAIRMAN. Are there any questions?

Senator CLARK. I have no questions on the points of the bill he has spoken to.

Mr. POWELSON. On any other points, if I have any information that will be of service to the committee, I will be glad to give it to you.

Senator CLARK. I do not think I have any questions to ask. The question that occurred to me was whether or not there should not be some obligation upon the Government to grant these permits in case the law and regulations were fulfilled by an applicant.

Mr. POWELSON. I am absolutely in accord with that proposition, because I think it is going to make it cheaper to get money. I think one of the main purposes of this legislation is to get cheaper power to the people, and anything that makes financing expensive will increase the cost of the power. I may say between 80 and 90 per cent of the cost of generating water power is made up of fixed charges. The operating expenses are, therefore, substantially negligible. Anything that runs the cost of money up will increase the cost of the power to the people and the people will have to pay it, so I think that this bill should be very definite in its terms in order that the people who enter into this thing will know exactly what terms they are going to get. And if it is definite, they will be able to get the money much cheaper.

Senator STERLING. What do you think about the prohibition of the right of contract to deliver to any one customer more than 50 per cent of the total output? That is a matter that has been mentioned.

Mr. POWELSON. Senator, I think that if you would analyze that provision of the bill and measure it by these three standards I have laid down you would come to the conclusion that it would tend to defeat those three main purposes which I mention as being essential. In other words, it would tend to retard the development of powers, because there are many powers in unaccessible places for which a market has to be created where there is no existing market, and you can not build a water power twice as big as necessary and carry all your fixed charges when selling only 50 per cent of its output unless it is a very exceptional water power. To create such a market very low prices must be charged.

I think that provision in the bill should be changed.

Senator STERLING. I understand Mr. Pinchot questions the advisability of that provision.

Mr. POWELSON. Yes; I understood Mr. Pinchot as stating yesterday he would not object to a change of that provision eliminating the 50 per cent clause.

Senator SMOOT. You are not interested in any way as to whether the Federal Government has the right to tax water developed in a State, are you?

Mr. POWELSON. Yes; I am, Senator. I believe that any tax that is put upon this water is bound to be put upon the consumer eventually. It may not be this year or next year, but it will be in a very short time.

Senator SMOOT. That is hardly an answer to my question. My question was, Have you any interest in the question as to whether the Federal Government has a right to tax power developed in a State from water wholly within the State? That is a constitutional question.

Mr. POWELSON. Yes; that is a constitutional question, and I have an interest to be informed about such questions. But I do not understand, Senator, in what other respect you think I might be interested.

Senator SMOOT. I was going to ask you whether you had formed an opinion on that question or not.

Mr. POWELSON. No, sir; I have not.

The CHAIRMAN. If there are no further questions, that is all.

Mr. POWELSON. I thank you very much.

(The following papers were submitted by Mr. Powelson for the record:)

WASTE OF THE WASTE OF OUR NATURAL RESOURCES DUE TO THE NONDEVELOPMENT OF OUR WATER POWERS—A PLEA FOR LEGISLATION TO PROMOTE THE PUBLIC WELFARE.

[Address delivered by W. V. N. Powelson before the National Conservation Congress at Washington, D. C., November 20, 1913.]

Mr. President, ladies, and gentlemen, to assist the friends of conservation to appreciate the character and to measure the extent of the waste of our material resources involved in the continuance of water-power sites in an undeveloped state is the principal object of this paper.

I have chosen this phase of the problem because I believe the time has come when, to preserve our character as friends of conservation, we must bring about the prompt development of those water-power sites for which a market can be or can now be created.

Heretofore, because of our lack of knowledge of the subject it did not seem good strategy in the fight for control of the water-power sites in the public interest to move quickly toward their development. We needed time for study,

to be used hereafter, but the energy of water which is allowed to flow by unused neither increases or diminishes the future supply, but it is irretrievably lost. Our supply of coal—the principal source of energy—while vast, is not unlimited. The utilization of water power resuls in the saving of coal for future use. In other words, the real waste of water power is its nonuse, while its development effects a conservation not only of water power but of our fuel supply as well.

"The importance of effectually utilizing the water powers of the country is therefore obvious. The power now (February, 1912) required to operate the industrial enterprises and public service utilities of the country (excluding steam railroads and vessels) can be safely estimated at not less than 30,000,000 horsepower. Approximately 6,000,000 horsepower is now generated by water, the rest is generated from fuel, mainly coal. The quantity of coal required to produce a horsepower hour in steam varies according to the quality of the coal and the size and efficiency of the engines. It is claimed that under the most favorable condition a pound of coal can be made to produce one horsepower hour. From this minimum the estimated quantity ranges as high as even six or seven pounds. Assuming, however, that on the average a horsepower hour in steam can be produced by 3 pounds of coal (and this quantity probably understates the average quantity of coal required, and the corresponding saving by the substitution of water power) the power now produced by water saves at least 33,000,000 tons of coal per year. This is based on a 12-hour day.

"By reason of distance from markets, cost of development, and other causes it will doubtless be many years before a quantity equal to even the 'minimum potential' water power of the country, 32,083,000 horsepower, can be advantageously developed. It is certain, however, that under favorable conditions several additional millions of horsepower can now profitably be developed from water, thus effecting a still further conservation of our fuel. The millions of water power economically available, but undeveloped, represent absolute waste.

"In brief, the real conservation of water power is its use. So much of this natural resource, therefore, as can advantageously be used should have prompt and complete development; but in doing this certain important economic forces are called into action, and the effect of these forces upon the public welfare must be fully recognized and the public interests safeguarded."

With these sentiments so admirably expressed by Mr. Smith, I am confident all who have investigated the subject are in accord.

This extract from Mr. Smith's report indicates that for each horsepower economically available for development there is now being substituted and burned 5½ tons of coal per year. This is based on a 12-hour day. This represents, as he says, "absolute waste." At $2 per ton this is equivalent to a waste at the rate of $11 per year for each undeveloped horsepower now economically available for development.

Mr. Smith states that there are several million of horsepower undeveloped that can now be profitably developed. Assuming that by several millions he had in mind, say, 5,000,000 horsepower, then the nondevelopment of this power represents an absolute waste to-day at the rate of 27,500,000 tons of coal per annum.

In the words of Mr. Smith, "these millions of water power economically available, but undeveloped, represent absolute waste." If the entire 32,000,000 minimum potential horsepower as estimated by Mr. Smith were developed, the total saving of coal would be about 175,000,000 tons per annum. It may be of interest to know that our present consumption of coal for all purposes is about 500,000,000 tons per annum, of which about 90 per cent is for industrial purposes.

Does not the possibility here presented of increasing the saving from 27,500,000 tons per annum to as near 175,000,000 tons as practicable present a field for fruitful endeavor on the part of the Government? Does not the possibility of so tremendous a saving of our natural resources suggest that the attitude of the Government should be at least sympathetic and not repressive? Does it not even suggest that the public welfare may soon require the principle of a bounty to encourage the development of its powers? These will be found fruitful subjects for reflection.

Returning now to the estimated present waste of 27,500,000 tons of coal per annum, as based on Mr. Smith's data, what does this annual waste amount to in value? The average price of coal is probably in excess of $2 a ton, so that

a measure of the present value of this waste would probably exceed $55,000,000 per annum. However, there is some question as to whether we should treat this 27,500,000 tons of coal per annum from the point of view of its present value or from the point of view of its value at the time when the reserve, of which this 27,500,000 tons would form a part, would be required for use. It would seem reasonable that the smallest value that could possibly be put upon it would be its present value; and, therefore, it would appear that we, as a nation, are losing at least $55,000,000 per annum as the result of the non-development of 5,000,000 water horsepower economically available at the present time, or at the rate of $11 per horsepower per year. However, as conservationists, I think we are bound to give some consideration to the value of the coal in the ground at the future time when this reserve will be needed. At that time it will be so much a question of dollars and cents as it will be a question of keeping the human race warm, for, presumably, long before that time the coal resources will have been husbanded and held almost exclusively for this purpose. Coal possesses a tremendous value for heating which water powers do not, and there is a very important question of economics involved which I shall not treat further here than to mention that whenever coal is used to do work that water power can do we are employing an agent of a very high order to do the work of an inferior agent. The question of the full and true value to be placed upon coal which we could save by the development of water powers is too intricate for treatment here.

As against those tremendous losses to the nation, due solely to delay, what have we gained by the delay? What did we hope to gain by delay? I can not better state what we hoped to gain than by adopting the words of Mr. Herbert Knox Smith from the report referred to, as follows:

"If the public permits private parties to develop and operate its water powers, it can charge rental for that right which will go into the Public Treasury. It is only through some such reservation and through the operation of the one agency that represents the public, namely, the Government, whether State or Federal, that the advantages inherent in water powers can be reserved and distributed to the community as a whole. This consideration must therefore primarily dominate the water-power policy."

This is what we sought to gain. Now, what have we actually gained by the delay?

We have caused to be universally accepted the principle of an efficient governmental control, and we have preserved to the Federal Government the potential opportunity to collect a rental for the use of its water-power sites.

I use the word "potential" because if the rental fixed is more than the traffic will bear at a particular site the development will not be made, and no rental will be collected from it.

The most important and the important thing we have gained is universal recognition of the principle of an efficient governmental control.

It is probably not of vital consequence to the public welfare whether this control be exercised by representatives of the Federal or the State Government. The important thing is that the control should be efficient and fair and in harmony with the public welfare.

Of far less consequence, to my mind, is the preservation to the Federal Government of the "potential" opportunity to collect a rental from a site for the benefit of the Public Treasury, because I doubt the expediency of an attempt in this form to distribute to the people their fair share of the values flowing from the development of their sites.

Water power, like city real estate, exhibits enormous differences in earning capacity. Many water powers have little or no commercial earning capacity in competition with coal. It would require in many cases a bounty to bring about their development. If we charge a rental on all water-power sites at a uniform rate per horsepower of available capacity only those sites will be developed that can stand the rental. Other sites that might have been developed under a smaller rental or under no rental at all will lie idle and valuable supplies of coal will be consumed to do their work. Is it not true that what we might collect for the people as a rental from a dozen developed water powers would easily be lost to the Nation from the waste involved in a single undeveloped power whose development was prevented by the rental policy?

We have seen that at $2 per ton for coal the waste, according to the data of Mr Herbert Knox Smith, is $11 per horsepower year for each several million horsepower that are now commercially available for development, a total annual loss of around $55,000,000.

How can the Nation recoup such a loss by collecting "for the community as a whole" a rental from the sites, and if it could, how great per horsepower year would the rental have to be to recoup so great a loss; and would this rental be within what the traffic would bear?

Fundamentally the question of a rental collected for the benefit of the Public Treasury is not a question of conservation at all. It is a social question contemplating an equitable division of potential profits, essentially the same as other social questions that have been correctly solved by governmental supervision and control of the service contracts and profits of public-service corporations. No new form of wealth is created by the imposition and collection of such a rental or tax, and therefore each year we permit coal to be used, to do work that can as economically be performed by water power we, as a nation, are being impoverished by the value of the coal so used, now estimated at about $55,000,000 per annum.

The Nation can not as a whole be injured without its effect being felt by every class of which it is composed, so that even if we were to view this question, not from the broad standpoint of the Nation itself, but from the narrower viewpoint of that class which is most numerous in the Nation, the conviction must still be forced upon us that if the Nation itself continues to be impoverished, the aggregate injury to this class may thereby be caused to exceed any possible advantages to it from the "potential" opportunity of the Federal Government to collect for the "community as a whole" a rental on water-power sites.

If the purpose of the rental is to secure to the people as a whole all the profit from the development after capital has had its fair return, the rental policy, in my judgment, will not accomplish this purpose if it is fixed uniformly at so much per horsepower of available capacity at the site, as has been suggested.

While I am in entire sympathy with the purpose of the rental charge, I must confess that, in my opinion, unless it be based in each particular case either on actual profits earned or on an agreed estimate of prospective profits prepared in each particular case as the result of a most skillful and exhaustive investigation, the rental policy if applied generally may do much more harm to the public welfare than good. But in suggesting that the rental policy may be impracticable I am not suggesting any abandonment of the purposes for which that policy was suggested. Excessive profits, if earned, must be returned to the people, but it appears to me fundamental that an excessive profit must have been actually earned before a division is due, and the extent of the division must be controlled by the amount of the profit.

A remedy that will prevent excessive profits without retarding development must, it seems to me, be based either on a policy of price regulation by the Government, or of profit sharing with the Government. If there can be no regulation of price below the competitive price of coal produced power without unfair discrimination against those consumers of power who are not fortunate enough to be consumers of water power, then excessive profits should probably be distributed to the people through a sharing of profit with the Government.

But what is the measure of this share of the profit which it has been sought to secure to the people as a rental system? How much has it been suggested should be collected annually for the people from the 5,000,000 economically available horsepower now going to waste? How does the potential value of it as a gain compare with the actual loss to the Nation for the three years that it has been going on and is still going on because of enforced nondevelopment?

I may be pardoned if I take this opportunity to say parenthetically that in suggesting that we now compare our actual losses through delay with the expected benefits to flow from wise legislation, I do not mean to imply any criticism of the policy of nondevelopment pending investigations of the questions involved.

It is often said that a person's hindsight is better than his foresight, and if the opportunity to do a complicated thing over again should be presented there are a few of us who would not do some things differently. A thing is always wisely done regardless of consequences if in the light of the knowledge available at the time it was the logical thing to do, and I think to halt until we could get our bearings was the logical thing to do.

I admire the courage of the men who have prevented the development of our water power sites; their patriotism; their high purpose. I am not one of those who would impugn the motives of these men if they should now insist that these sites be contained a while longer in their natural condition. I would understand that they believed this policy necessary to the public welfare, but I would question their judgment.

I do not remember having heard it suggested in any quarter that the proposed rental should exceed around $1 per year per horsepower of a site capacity, and the fear has been expressed in some quarters that a charge exceeding 50 cents per horsepower might retard, if not prevent, the development of many otherwise economically available powers.

It may not be out of place to say here while considering the amount of the rental, that water powers may be divided into three general classes. First, those capable of producing power considerably cheaper than by coal. The number of powers in this class is not very great. In the second class the saving over coal is small, and the margin of saving may be so small that mistakes in the estimate of cost or unusually adverse conditions during construction might easily make the difference between a success and a failure of the enterprise. In this class there are a very large number of powers. But the largest class of all consists of those powers that are not now economically available as competitors of coal.

Assuming that the traffic would bear an annual rental of $1 per horsepower of site capacity for the several million horsepower now, in the judgment of Mr. Herbert Knox Smith, economically available, then the largest sum which it has been suggested we gather into the Public Treasury from every undeveloped water power in the country now economically available is but $5,000,000 per annum. If by several million horsepower Mr. Smith means 5,000,000 horsepower. Let us assume for the purposes of discussion that the imposition of this rental or tax does create new wealth for the Nation to the extent collected. How does this potential gain compensate for our losses, actual in the past and present, prospective in the future?

The losses which we are now suffering through waste of our natural resources estimated at $55,000,000 per annum of $11 per horsepower per annum is the equivalent at 5 per cent of an annual sum in perpetuity equal to 55 cents per horsepower per annum on the whole 5,000,000 of economically available horsepower.

A delay of two years, therefore, represents a loss equivalent to an annual sum in perpetuity of more than $1 per horsepower on the whole 5,000,000 horsepower. A delay of three years, which I think it may be conceded we have experienced, has probably cost us the equivalent of a sum in perpetuity at the rate of $1.50 per year per horsepower on the whole 5,000,000 undeveloped horsepower.

A superficial view of the question might suggest that the country could recoup these past losses by charging a rental of $1.50 per horsepower per year and make a profit by charging a higher rental, but no country can enrich itself or recoup past losses by a tax, because a tax merely changes the ownership of a part of the wealth of the Nation. We can never recoup for the Nation the losses that have already been incurred, and it is our imperative duty to bend all our efforts to stop further waste.

I think it should be conceded that there will be considerable competition between different groups skilled in water-power development in this country and abroad if the opportunity were offered to development those sites now controlled by the Federal Government and that are economically available, and therefore it seems to me the part of wisdom for those having the public welfare at heart to ascertain at the earliest practicable moment the terms, the best offer which responsible capital will come forward in competition to develop water powers and unless the acceptance of these terms will be more harmful to the public welfare than the continuance of our water powers in an undeveloped state, these terms should be accepted and all parties should join in securing the legislation necessary to bring about the developments forthwith.

So far as I know, investors are not dissatisfied with the attitude toward capital as far as it pertains to the rate of return.

The community would thus be without adequate service and would be paying for such service as was rendered all the traffic would bear, with the further disadvantage of not being able to get any more service even at such a price.

As what stage in the tenure period this condition would occur would depend upon how cheaply the water power could produce electricity. If the cost was substantially equal to that by coal, this condition would be reached early in the tenure period. If the cost was lower, this condition would be reached later.

To make clear why after the water power is put in operation there is need for such a constant supply of new capital, I may say that it is seldom that the initial expenditure at a water-power site fully develops it. The initial expenditure is kept as small as possible consistent with the existing market,

As new business is secured, further expenditures are necessary both at the hydroelectric plant and in added transmission facilities.

It is proper to include the cost of the transmission facilities in the amount to be amortized, because this is merely the body, in which the water power is the heart. If deprived of the heart's action the body dies.

To properly perform its function to the public, a public-service corporation should be able—indeed, it should be required—to serve within its sphere every legitimate need of the public. If the public welfare requires that the corporation should enter into long-time or even perpetual contracts with its consumers, it should be under no legal disability to do so.

One case will illustrate the point.

Many of the western power sites when developed will supply large quantities of power for irrigation to be used in pumping water on lands that can not be profitably irrigated by coal power.

It is the experience that irrigation projects can not be financed unless the water right is perpetual and runs with the land.

If this be true, then such irrigation projects as I have described can not be financed without a perpetual contract for power. Obviously a public-service corporation may not make a contract for service beyond the limit of its tenure unless the State is obligated at such date to take over and assume the contract.

More could be said on this general subject of credits, prices, and service, but I think I have said sufficient to show the baneful influence upon the usefulness to the public of a public-service corporation operating a water power under a limited tenure.

However expedient it may be considered to apply the principle of limited tenure to a water power built to serve a private use, I think we should, in view of the arguments just stated, gravely consider whether in the case of a public-service corporation acting as the agent of the State the proposed requirement of a limited tenure should not be abandoned.

I have tried to present the matters herein discussed in a fair and impartial light, and I should be glad to think that I had in your opinion succeeded.

Facing, as we all are, such a tremendous waste in our natural resources from further delay in developing our water powers, I appeal to all patriotic men and women, without previous convictions on this subject, to again examine the grounds for your convictions, and to make your conscience the judge of how far you should yield in an effort to reach an agreement that will put a stop to this waste by a speedy development of the powers.

I have not heard it stated anywhere that anyone is opposed to investors receiving a fair, even a liberal return on their money devoted to water-power development. The leaders of the conservation movement have always recognized that capital is entitled to a fair, and indeed a liberal, return, and I can not state their position more concisely than to quote from the testimony of Mr. Gifford Pinchot before the National Waterways Commission in 1911, as follows:

"I should like to be understood as asserting with a good deal of vigor that I believe investors who go into water-power development should be given a much more generous return on their investment than men who go into a less hazardous business, for the risks of a business of that kind are certainly very large. The public needs the development of water powers.

"I can say, for instance, that it is wholly impossible to expect general water-power development under present conditions on a 6 per cent basis. The risks are too large. Ten or fifteen per cent would be more like what is required to induce capital to go into the field."

So far as I am in touch with the class of investors who can be induced to undertake the development of water powers, I believe I am justified in saying that while there are in other quarters decided differences of opinion as to whether the governmental control should be Federal or State, the water-power investor as a rule does not care which it is provided it is not both at the same time. He insists that he serve but one master.

It is feared that if the control is dual a conflict might arise between the State and Federal authorities which would result in injury to the investor. There is a feeling, however, that because the State has inalienable right to regulate public-utility corporations doing business within its boundaries, the Federal Government should relinquish to the State its right to exercise a control, provided that the developing agent takes the form of a duly incorporated public-service corporation, subject to and recognizing the State's right to supervise and control its acts. Since its revenue would be derived almost wholly from the sale of its

power for public uses, it would not be a difficult matter to determine what its actual profits are, and the State, through its power to regulate, would always be in a position to place a reasonable limit upon those profits by reduction of prices, by taxation, or by both.

It is for a public use of this kind of water powers that there is now so pressing a need for legislation.

It may not be out of place here to call attention to what seems to be a fundamental difference in the case where a power site is to be developed for private use. When developed for such a use, the profits would not be derived from the sale of power, but from the sale of commodities manufactured by the use of that power, and it would be much more difficult in this case to put into practice an effective plan of control which would give to the people what might be considered their fair share of the values created by the development.

The treatment of this private use of water powers may require for its correct solution more time for further reflection and study, and if this be true, it would seem the part of wisdom not to delay action pending the necessary discussion, but to proceed at once to bring about legislation that will enable public service corporations to raise the money necessary to make water-power developments for public use, leaving until a future time the settlement of the more difficult question of the private use of water powers.

While there does not seem to be, other than the desire to eliminate a dual control, any marked preference on the part of the water-power investors for Federal or State control there does seem to exist a very marked preference for a Federal control on the part of those who have been heretofore most active in the conservation movement.

As I understand the matter, their preference for Federal control springs from a distrust of the State's machinery for control. They understand the advantage to any community accruing from the expenditure in it of very large sums of money on construction work, with the prospect of added population and employment after the power development has been made. They fear that if two States containing water-power sites become active competitors for the expenditure of money in hydroelectric development capital might obtain concessions which would limit the opportunities of the people to participate to the extent they ought in the values created by the development. In other words, if I correctly understand their position, they regard the people of the general section in which the development is to be made as incapacitated through self-interest to look after the welfare of those to come after, and they desire that the Federal Government shall exercise a guardianship over the future of the State, because they believe the Federal Government to be free from the evil influences of self-interest.

A strong preference in favor of control by the State is held by those who are citizens of the State and who believe that in the long run control by the State will be more truly responsive to the legitimate needs of both the people and the power companies. They point out that the uses to which these water powers will be put in the different parts of the country and the conditions surrounding these uses will be so different that it is doubtful whether a controlling body at long distance from the place of use can be made to understand and properly administer to the needs of the particular locality.

The question of a limited tenure, however, seems to be the real sticking point. Because I believe there is much merit in the arguments of those who affirm that it is against the true interest of the public to limit the tenure of rights granted to public service corporations, except for breach of contract, I will summarize as best I can their position.

A public service corporation created by the State and engaged in a work of internal improvement is quasi public in character and is entitled in many States to exercise the State's sovereign power of eminent domain. The generation and distribution of electricity to municipalities and the public generally is a public use, and an association organized as a public service corporation engaged in generating electricity by water power and offering it for sale to the public is in effect an agent of the State supplying a public use and as such is subject to the State's supervision and control.

Most States have by legislation provided the machinery to give effect to this right to supervise and control, and it should be conceded that those States that have not yet done so will not neglect much longer to give effect to those rights.

The State's sovereign power to supervise and control a public-service corporation extends not only to the power to regulate and fix prices, but it extends to

the character of the service and to every act which directly or indirectly influences the public welfare.

The business served by a public-service corporation supplying electricity never ends its growth. It is, so far as experience teaches, continually growing and expanding.

In prosperous communities the annual requirements of such companies for new capital for improvements and extensions often largely exceeds the annual net earnings, and at times exceeds the annual gross earnings, so that the ability of the company to give adequate service is dependent upon its ability to continually borrow money for its extensions. If for any reason the credit of a company is impaired, its ability to make extensions is impaired, and to that extent its ability to adequately serve the public is impaired.

A public service corporation operating a water power under a limited tenure would not be able to borrow money for extensions or improvements which it could not demonstrate would be returned, principal and interest, out of earnings prior to the limit of its tenure.

During each succeeding year of operation the sinking fund percentage on moneys expended for improvements during the year would have to be increased. This would necessitate an increase in price each year which the State's right to control might not be able to prevent because the State's right does not extend to a confiscation of property and the prices may not be regulated below a point which would prevent the return to investors of the principal with interest at the expiration of the tenure period.

Prices would thus grow each year until they reached the limit of what the traffic would bear. Above this they could not go; so that when this limit was reached the demand for new capital for extensions would automatically cease and growth would end.

(This is the memorandum referred to in Mr. Powelson's letter to Secretary Lane, dated January 23, 1914:)

THE LIMITED TENURE OF WATER-POWER GRANTS.

[By W. V. N. Powelson.]

Legislation that has been enacted by Congress limits Federal grants in aid of water power to a period not exceeding 50 years.

It must be presumed that the motive leading to the adoption of this policy was a desire to promote the general welfare of the people as a whole, but in such a manner as neither to grant unfair advantages to one class nor to impose unjust conditions upon any other class of our citizens.

The purpose of this discussion is to examine the limited tenure policy in the light of this assumed purpose of the national legislature, with the object of discovering whether an adherence to this policy will accomplish the end sought.

Let us first consider, and then throughout this discussion keep clearly in mind the peculiar nature of a water power.

A water power is a structure so built in all its parts as to be capable of converting the energy of falling water into some other form of energy more useful to mankind. It is, therefore, a factory for making energy. The early water powers converted the power in the falling water into mechanical energy typified by a rotating shaft capable of driving machinery by gear wheels or belts.

A peculiar limitation was placed by nature upon the market for the product of the early water powers—none other than that the entire output must be consumed on the immediate premises. In this respect it differed from all other factories. Other factories had their market limited only by the cost of transporting their output by common carrier to the consumer.

Whereas the output of the earlier water powers, viz, mechanical energy, could not be transported to a distance by any means whatever, it is a fact that the advance in the art of electricity in recent years has made it possible to deliver the energy manufactured by the water power to distances limited at present to around 200 miles. The extra cost of the modern water power, due to the installation of electrical generating machinery therein, is therefore the price, and a very large one, paid to escape from the limitation that the product or output of the water power must be consumed on the immediate premises.

The characteristics therefore which chiefly distinguish a water power from all other manufacturing plants are:

(a) That its product must be consumed either at the plant or at points within a radius of about 200 miles therefrom. Its market therefore is purely local.

(b) That the product when transported for consumption at a distance from the water power can not be sent by a common carrier, but must be transported over a special structure devoted exclusively to such use, and unfit for any other use.

(c) That the energy manufactured, if of a form capable of transmission to a distance, can be utilized only by the installation of expensive electrical machinery and apparatus at the point of delivery.

Keeping always before us the peculiar nature of a water power as a manufacturing plant, let us inquire into the financial requirements that the holder of a 50-year grant would probably have to meet to raise the money to build the water power, and also let us inquire into some of the fundamental principles upon which he would establish a just system of rates which would yield the return which it was necessary that he should convince investors they would receive at the time they subscribed to the enterprise.

Without capital, and in large amounts, our water powers can not be developed. Money is a commodity that has to be bought and paid for the same as wheat and corn. Its price varies, influenced not only by considerations of security of investment and return, but by many technical considerations which are beyond the limits of this memorandum to discuss. The price to be paid for capital having once been fixed and determined by the free competition of money in an open and free money market, it is very important in the general interests of water-power development that the rates for power should make the return to the investors equal to their reasonable expectation at the time the investment was made. Disappointment in this respect creates a distrust of this character of investment, and this distrust would be reflected in a higher price for money for future development. Continued realization of the hopes of the investor would create a confidence in this character of investment that would be reflected in a gradual lowering of the price of money for development work of this kind.

The object of legislative action regarding water powers ought to be to provide the people at the earliest possible moment with the benefits to be derived from power that otherwise would go to waste, and at the lowest rates consistent with the proper and speedy development of the powers. Delay in building a power for which there is a demand results in a great and continued economic waste—a waste which, if continued but a relatively short time, would result in a loss to the people greater, perhaps, than the sum total of all the profits that unregulated monopoly could wring from them.

In dealing with the question of water power there is, therefore, the possibility of as great danger to the welfare of the people from inaction as from improper action.

A wise policy should seek to create confidence in water-power investments to the end that money could be attracted in large quantities to these investments, and on the lowest possible terms. The importance of obtaining money on the lowest possible terms for a water-power enterprise is transcendent, and is emphasized by a consideration of the fact that the cost of generating power from water is largely the price, or "hire," paid for the use of the money required to make these developments. The annual cost of operating the water-power plant when built is usually very much less than the annual fixed charges on the investment in that plant, so that of the total cost to manufacture a horsepower, and deliver it on the switchboard of the plant, from 80 per cent to 90 per cent is the "hire" paid for the use of the development money. A relatively small increase in the annual percentage paid for the use of this money would therefore increase substantially the cost to manufacture a horsepower, and would therefore cause a substantial increase in the price of the power to the consumer.

Other things being equal, any action by the Government that would lower the market price for money for water-power investments would directly and substantially reduce the cost to produce power and would tend to increase the amount of power developed, while, on the other hand, any action by the Government that would increase the market price of money would restrict the amount of power available and increase the price to the consumer.

The principle of a limited grant carries with it the suggestion that at the end of the grant the title to the property created by the investment will pass

to other parties without consideration. So long as any doubt on this point exists, it will be resolved by the investor in such a way that he will not feel secure unless he believes it certain that the profits of the business will be sufficient to return his principal before the expiration of the grant and, during the whole period of the grant, an acceptable return upon his investment.

It would often require from 7 to 10 years after a grant had been made to raise the necessary money and complete the development, with the result that the period allowed for the operation of the property under a 50-year tenure would be reduced, in many cases, to around 40 to 43 years. Under these circumstances, and the uncertainty surrounding them, the development could probably not be financed on bonds of longer than 30 years term, and such bonds could not be retired by the proceeds of the sale of a refunding bond. Provision must therefore be made to retire the bonds on or before maturity by means of a sinking fund or amortization reserve of some kind, which must be accumulated out of earnings.

If we assume that the development will be financed upon 5 per cent bonds (many have found it necessary to issue 6 per cent bonds) it will be necessary to issuse those bonds at a discount, the size of which will depend largely upon the prospects of success and the then condition of the money market. It is doubtful whether bonds upon a new enterprise, hazardous of construction, uncertain both as to its cost and the amount of power available, and of unproved earning power, could be sold to the original underwriters at as much as 85 per cent, and the chances are that not more than 80 per cent of their face value could be realized. For the purpose of this discussion, and because it illustrates with entire accuracy the principle involved, it will be considered that all the money is raised by the sale of bonds.

The par value of the bonds issued would, therefore, probably exceed the actual cash cost of the development by about 25 per cent, so that, in order to retire these bonds at maturity, it will be necessary to set aside out of the earnings, and during the first 30 years after beginning the work of construction, an aggregate amount equal to 1¼ times the actual cash cost of the development. If we assume a cash cost of $100 per developed wheel horsepower of hydroelectric plant, equivalent, on account of the losses due to conservation and transmission, and the necessity of maintaining a sufficient reserve against accidents and ordinary repairs, to a cash cost of about $160 per horsepower actually delivered to an average customer, then, under the plan of finance above mentioned there will have been issued bonds against each horsepower of the delivered capacity of the plant equivalent, in principal amount, to 125 per cent of $160, or to $200, in principal amount per delivered horsepower.

There must be returned, therefore, to the investor, under the limited-tenure grant, at the date of maturity of the bonds $200 in cash for each horsepower of delivered capacity. This date will be, under our hypothesis, 30 years after the date of the commencement of actual construction, because the bond issue would have to be made prior to construction in order to raise the money, and the term of the bond would by practical financial considerations be limited to about 30 years.

In view of this obligation, how much extra would the operator of the water power be entitled to charge (assuming the traffic would bear it) the consumer per horsepower year in order to accumulate a fund sufficient to retire the bonds at maturity? This sum would be the result of a simple mathematical calculation, if we could assume that all the power developed could be sold for delivery immediately on completion of the plant. Under such circumstances the sum would be that amount which put at interest compounded annually at 5 per cent would equal $200 at the date of maturity of the bonds. If we assume three years as the interval which must elapse from the date of issue of the bonds to the completion of the plant, there will remain a maximum earning period of 27 years in which to collect from the purchaser of one horsepower this extra sum of $200 cash. But it is the common experience that no plant is ever able to sell its entire output immediately on completion of construction. It requires a substantial time, and in many cases years, to develop the market to this extent.

If bad judgment were shown in estimating the size of the market that could be served, or if other water powers were subsequently built so that the combined capacity of all the powers competing was greater than the market that could be immediately created, or if the capacity provided was found greater than the low-water stream flow could supply, then it might transpire that the entire capacity provided could not be sold for many years, if at all during the

life of the bonds. But the annual contribution toward the sinking fund of $200 per delivered horsepower for each horsepower of plant capacity built must be collected whether the entire capacity is sold for the full period of 27 years or not. We can not, therefore, fix this extra charge per horsepower at an annual sum which at interest would equal $200 in 27 years. We must fix it at a higher rate, because the horsepower sold during the first years must carry the sinking fund charge for the horsepower lying idle until a later period, and in fixing this charge we must make some assumptions regarding the probable time that such horsepower will be idle, and it would be sound and prudent to estimate that the power would be idle a little longer rather than it would be idle exactly as long as the then conditions seemed to indicate. It seems reasonable to believe that this principle would be fully recognized in any proceedings to fix rates by governmental authority.

The larger the development the longer time it will take, other things being equal, to market its full capacity. It would be impossible to lay down any general rule as to the period of time that would be necessary to market the entire capacity of a water power, and therefore it would be impossible to lay down a fixed rule as to the equivalent period during which it ought to be considered that the entire capacity had been sold prior to the date of maturity of the bonds.

It would seem the part of prudence and a just business policy for the manager of a water-power plant to add, on account of the 50-year tenure, to the charge that he would otherwise make per delivered horsepower per annum, an extra annual sum of such amount that it would, if invested annually in safe interest-bearing securities, amount in 20 years to the face value of the bonds issued per horsepower of capacity. In the case assumed, the face value of the bonds so issued was $200 per horsepower delivered to customers, and therefore the charge to the customer must, in fairness and in justice, be increased on account of the 50-year tenure, by a sum per horsepower year that it would, if invested annually in conservative interest-bearing securities, amount in 20 years to $200. If invested in 5 per cent securities such sum would amount to $6.25 per horsepower per annum.

This conclusion is very important. If true it means that every customer using power from a water power built under a 50-year tenure, and costing $160 for the necessary plant generating capacity to deliver 1 horsepower to the average customer, must pay at least $6.25 per horsepower per annum more than he would have paid had the tenure been unlimited, and the annual profit during the term of the bonds the same to the owners of the water power. The users of the power from a development are taxed, therefore, $6.25 per horsepower year, as a contribution to a sinking fund, and in order that the builders of the development may get all their money back and relinquish the plant to the Government at the end of the tenure period. In other words, the users for the first 27 years of power from that development must raise a fund large enough to buy the water power, and when bought they must, in effect, turn over this hydroelectric plant to the Government, so as to make it possible for future generations to receive power at operating cost from a Government-owned plant which they paid for and costing the Government nothing. It hardly seems in accordance with our traditions that so heavy a tax should be laid upon the people of a small district for the benefit of our people as a whole, or of the people who may hereafter inhabit that small district.

But this tax of $6.26 per horsepower year is not the whole tax that the users for the next two generations of power from such a development must bear if water power is to be developed under the 50-year tenure. They must not only contribute enough money to buy the water power itself, and present it to the Government, but they must contribute enough to pay for all the transmission lines, apparatus, and equipment which for use are dependent upon the water power, and which if divorced from the water power, would be useless in the hands of their owners.

What this transmission and distribution investment per horsepower would be as a percentage of the cost of the hydroelectric plant itself per horsepower can not be stated as it would vary greatly under varying conditions.

Where the water power is located a comparatively long distance from its market the cost of the high-tension transmission lines alone may closely approximate the cost of the water power itself. In addition to these high-tension transmission lines expensive substations are necessary at the various distributing points. These transmission lines and substations would have very little salvage or scrap value, and would therefore be of very little value to anyone

except the owner of the water power from which thery had been supplied with electricity. In addition to these transmission facilities there would have to be added a very substantial sum per horsepower for local distribution systems if the grantee took the form of a public utility light and power corporation.

If the original owners, hereinafter called the projectors, must provide in their financial plan for the relinquishment to the Government of the water power, because their tenure of that property is, by the terms of their grant, limited, they must no less provide in their financial plan, if they are prudent, for the relinquishment or abandonment of their transmission lines, substations, and all other apparatus dependent for use on the water power.

In many cases the cost for such collateral investment would largely exceed the cost of the water power itself. It would probably be entirely fair, for the purposes of this discussion, to take it as equal to the water-power investment By the same process of reasoning as above we deduce that the purchasers of power during the first 27 years of operation must contribute a sum sufficient to amortize these transmission lines, substations, and, in the case of public utility light and power corporations, the local distribution systems.

On the assumed basis of a cash cost of $100 per delivered horsepower for hydroelectric plants and $160 per delivered horsepower for the collateral investment to deliver the power to customers, the purchasers of power must pay during the first 27 years of operation an extra charge or tax of $12.50 per horsepower per annum as an annual contribution to a sinking fund which would enable the projector to accumulate the sum necessary to reimburse, at the date of maturity of the bonds, investors for the loss of their property.

But, large as this tax is, it is not the full measure of the burden imposed upon the customers of the water power for the next two generations by the limitation of the grant. To the cost of the physical plant we must add the cost of transforming an aggregation of physical forces and materials into a going business concern with a developed market and a cash income. No general rule can be laid down governing the cost of creating a going concern, nor will any attempt be made here to reduce it to so much per horsepower of capacity sold That it is a substantial portion of the complete investment in such a property will not be denied, and that it is an investment that would be wholly lost to investors with the loss of the water power seems equally true. The cost of the business as a going concern must also be paid for by the consumer of the next two generations by further contribution to a sinking fund. It is probably a fact that there is no element of substantial value in connection with any phase of the businesses created and served by the projectors of the water power which would not be liable to be lost to them upon the surrender of the water power to the Government, and it therefore follows that the consumer of the next two generations must reimburse the projectors for the entire cost of their property and the business served by the water power wherever located If the "traffic" will not stand a charge for power high enough to pay operating expenses and an attractive return on the investment as well as the annual amortization or "sinking-fund charge" above mentioned, then no man can afford to and no prudent business man will undertake to develop under the 50-year tenure. Whether development under this limited tenure will be made depends therefore upon the "traffic" being able to support an excessive charge for power.

What the "traffic" will stand is regulated, not only by the value of the service to the consumer, but also by the cost to the consumer to secure an equal service from coal or a competing water power. Where coal or oil is high and power must be secured at any price the development will be made. Where coal is cheap the wisdom of making the development would be questionable and there can be no doubt that the development of many water powers will be prevented by a limited tenure policy.

It may not at first thought be clear why the relinquishment of the water power itself to the Government at the end of the tenure would probably destroy the value to the projectors of all property and business wherever situated, used by them, and dependent for use during the period of the tenure upon the supply of electricity from the water powers A consideration of the situation that would be created by the relinquishment of the water power at the end of the period will make this plain.

The projectors at the end of the tenure period must do one of five things They must either—

(*a*) Create a new source of electric supply of a capacity equal to that of the water power, thereby increasing the capacity available to substantially more than the size of the market.

(b) Purchase the water plant from the Government.
(c) Buy the entire output of the plant from the Government.
(d) Sell out their entire property and business to the Government.
(e) Scrap their property and abandon their business.

The alternative (a) is impracticable. Such a new generating plant would increase the available supply to twice the demand. It would be an economic extravagance and would be placed in competition with the Government water power, costing the Government nothing. It could not meet so unfair a competition, and therefore never would be built.

Alternative (b). For the Government to sell a water-power plant, the free gift of the citizens of the district, would be an act of injustice to the district more irritating because its effect would be better understood than the original act taxing of the district to pay for a water power to become the property of the Government.

Alternative (c). If justice would require that the district should be served at operating cost from a plant paid for by the former citizens and possible investors of the then consumers of electricity in that district and presented to the Government free of cost, then we must assert the injustice of the Government making any profit on the sale of the current from that plant to any person whatsoever, whether to the projectors of the enterprise or to others, for the reason that such profit, if substantial, is in the nature of an unreasonable special tax laid upon the consumers of electricity in that district for the benefit of the General Treasury of the United States.

The remaining alternatives (d) and (e) would, if adopted, result in no benefit to the people of the district, and would benefit only the projectors, for the reason that because the conditions as to their continuance in business at the end of the tenure period were so uncertain, the projectors were bound, in order to protect themselves, to raise (within the limits of what the traffic would bear) their rates to a point which would not yield an attractive interest on the investment during the tenure period, but which would provide a fund that would enable them to scrap the property at the end of that period. Therefore, having been reimbursed for their whole property by the imposition of a just extra charge for power during the tenure period, it would lay but another burden on the consumer for the Government to buy the distributing system and require the consumers to pay fixed charges on the money so paid.

Under uncertain conditions as to what will be their status at the end of the tenure period, the projectors will not make—for they can not afford to make—improvements or extensions during the last years of the tenure, because the necessary sinking-fund charges to amortize these extensions prior to the expiration of the tenure would probably be so large that when added to the cost of generating and delivering the power the cost of the service would be more than the traffic would bear.

During the latter part of the tenure period power conditions are bound to be chaotic in the district. The projectors can not afford to make extensions to meet the growing demands and competing water powers can not be financed for fear of the unfair competition of a Government-owned plant, which cost it nothing.

No one could afford to build a water power that in a few years would be put in competition with a power that cost its owner nothing and the output of which might in all probability be offered for sale at the bare cost of operation.

But to return to alternative (c). This really affords the only economic solution of the problem that would be presented on the expiration of the tenure. The projectors would own the distributing lines, and in view of the fact that their rates had reimbursed them for its cost they could afford to continue to distribute electricity from the water power formerly owned by them cheaper than could anyone else, including the Government. For the Government to duplicate these lines would be an economic waste that could only be justified by failure to reach a fair agreement with the projectors. The Government should hesitate to require the people of the district to pay interest on an unnecessary investment in a duplicate distributing system. Moreover, the Federal Government should hesitate in committing itself to the principle of conducting industrial enterprise purely local in its benevolence. On the other hand, if in order to escape the responsibility of the management of a distributing system, the Government sells the output of the plant to the projectors at a profit, or if to escape the further responsibility of operating the plant it turns the power over to the projectors and charges a substantial rental therefor, it is simply levying a possibly unreasonable tax on a special class in a particular

district for the benefit of the General Treasury of the United States, for it must be supposed that although the projector in the first instance pays the tax the consumer ultimately pays it.

To deliver the output of the plant to the projectors at the actual cost of operation, or to turn over the plant to them without rental, would not, in the absence of an efficient control over the rates, result in the benefit to the consumers that such action would contemplate.

The economic solution of the problem that would be presented at the end of the tenure period would therefore require an efficient control of the power to make rates, and the deduction is therefore plain that it is only by having the projector continue to distribute the electricity after the expiration of his tenure, but under Government regulation of prices, that the prices to the consumer can be reduced to a minimum.

But here, just as we are about to reach the goal for which two generations of consumers were severely and, may we not say, unjustly, taxed, we run into an impasse.

If the prices are so regulated by the Government that the projector charges for the power no more than the expense of operating the system, plus a reasonable profit for his skill and enterprise, then it will happen that the block of power which has thus passed through the tenure period must be offered for sale at a block price that will be but a small fraction—probably not more than 20 per cent—of the block price at which power from that plant had previously been sold, and consequently at not more than about 20 per cent of the block price at which power produced by coal or by another water power still in the hands of its projectors and passing through the tenure period could be profitably sold in that district.

The price of power from the "amortized" plant would, under the above conditions, be so low compared to the price that would have to be charged by the other plants to keep them solvent that it would almost be called "free power," and, for the purpose of accentuating the point about to be made, will be referred to as "free power."

Now, it is reasonable to suppose that as time goes on the market in the district will grow beyond the capacity of the "free power" available and it will become necessary to generate additional power in coal-burning plants or in other water-power plants built presumably under a similar limited-tenure grant. At such time a decision must be reached as to who in the district shall receive "free power" and who shall pay for it. To give "free power" to any citizen would give him the same kind of an advantage over his competitor as is given the recipient of a railroad rebate over his competitor who pays the published tariff.

While unreasonably high rates are intolerable, they may be far less disastrous to a community than discriminating rates. To prevent discriminating rates, therefore, the Government would probably require the projector who was distributing the electricity from the Government-owned plant to raise the rates to equalize them with the rates from the other plants operating in the district.

To prevent the projector from reaping the benefit of the high rates the Government would probably be forced to charge the projector a rental for the use of the water-power plant equal to the amount represented by such increase in rates, and this rental would be paid into the General Treasury of the United States and would be in effect a tax upon the consumer of power in the district.

Let us now examine the effect of this limited-tenure policy upon the consumers of electricity in the district. Have they benefited by limiting the tenure to 50 years in the water-power grant? It may not be out of place here to picture the probable course of events as related to power matters in the district served by a water power held under a limited tenure. If our picture is at once accurate as a forecast, and disastrous in its appearance, it may well serve as a warning against the pursuit of a policy which, by every process of reasoning, appears to lead directly to the condition shown.

The probable history of such a district in its power relations would be somewhat as follows:

At first the water power was welcomed, because the prices were more favorable than by other power-producing agencies theretofore available in the district, but this saving was soon forgotten. It was not sufficient to satisfy and but whetted the appetite for more. Complaint was made to the management that the rates were too high, and the question of the fairness of the rates became a political issue. Legislation was passed giving power to a public-service commission to regulate rates. The ensuing investigation disclosed the prac-

tice of accumulating a fund from income sufficient to pay off at maturity the 50-year bonds on the property, and the commission approved it, calling to the attention of the people the fact that if a property must be forfeited to the Government the projectors were entitled to be reimbursed for the property so lost, and that the only means they had to recoup the loss was an extra charge to the consumer for power. So the matter was dropped, but at the expiration of the 30-year term of the bonds the matter was again brought up. The consumers again applied to the commission, convinced that this time they were entitled to a reduction in rates. At the previous hearing the commission had justified the extra charge on the ground that the projectors were entitled to accumulate a fund to pay off the bonds at maturity. This fund was accumulated by the contributions of the consumers, and the bonds were paid off at maturity. The projectors had been reimbursed for their entire investment. The grant still had some 15 years to run and the consumers demanded that during this remaining period the prices be reduced to such a point that after paying all necessary operating expenses there would be left to the projectors only a fair fee for managing the property that the consumers had paid for, but which, as a matter of right, if not of law, belonged to them.

The commission investigated, and evidence was introduced to show that the projectors could afford to reduce block prices to about 20 per cent of the former rock price. But here a knotty question arose for the commission. True the projectors had been reimbursed for their property, and for them to continue to charge the old high prices for the balance of the tenure period seemed an outrage. But what were they to do about it. Here was the Enterprise Water Power Co. completed 10 years before to serve a rapidly growing market, and here was the Progress Water Power Co. just ready to begin operations. Both had been built under a 50-year tenure. Each was entitled to include both fixed charges and its sinking-fund requirements in making its rates. Could the commission fix for one company a lower rate than fixed for its competitors, or was the power of the commission limited to the making of general regulations applicable to all power companies operating in the community? The commission recognized that if limited to the latter function, it would operate to permit the old company to continue its former charges, with the result that the projectors would make an unconscionable profit.

They therefore examined carefully into the question whether the commission had power to establish different rate schedules for the several companies, and, if so, what principle should underlie their formulation. They were agreed that if they had such power, the schedules should, in principle, provide an equal profit for each company. On looking into the matter further they found that over 80 per cent of the cost of delivering the power in block was made up of "fixed charges" and "amortization" charges on the capital invested. These charges represented so many per cent per annum, and they found that this percentage should be the same in the case of the Enterprise Water Power Co. as in the case of the Progress Water Power Co. On examining the books of the several companies, they found that the first company in the field, the one they were seeking to regulate, had picked out the best water-power sites in the district; that the cash investment per horsepower of both the Enterprise and the Progress Co. was much higher than that of the company they were seeking to regulate, and that of all the companies, the first one in the field had the greatest investment per horsepower, because it had the poorest natural site. If the same percentage was to be applied to the several investments by way of fixed charges and amortization charges, the commission found that the last company in the field would be entitled to charge the highest prices. But here appeared the other horn of the dilemma. If the commission undertook to make different prices for each of the companies, who would be required to take power from the last company in the field, and who would be favored by service from the company with the lowest prices? The commission, if any action was to be taken, was confronted with either confirming a general schedule high enough to let the last company in the field make a reasonable profit, thereby sustaining the first company in the field in action in charging an unconscionably high price, or it must introduce discriminating prices in the community.

In principle the question was the same as that presented by two railroads competing between the same points, one of which roads cost twice as much as the other.

The commission decided, in view of the fact that there was no monopoly and that the competition was free and that the last power in the field was receiving no more than a reasonable profit, to let the matter rest.

Time went on, and finally the date of expiration of the tenure period arrived, and the title of the hydroelectric plant passed to the Federal Government. The popular notion in the district of a just Government regulation of rates had always been a downward revision.

In accordance with this notion, and because the Government paid nothing for the water-power plant, rates were revised downward. They were immediately reduced to around 20 per cent of the former prices, and the customers on the lines of the "amortized" property were happy. The great saving in the sum paid for power enabled them to produce more cheaply, and in consequence they were enabled to undersell their competitors in the district who paid the prevailing rates for power. Up to this time all went well, but just here the trouble began. The injured competitors complained to Washington that they were being discriminated against, that they were being driven out of business by the unfair competition of favorites of the Government, who were receiving power at but a fraction of the price at which power could be generated by coal or bought in an open power market. As all could not be served by the Government plant, they petitioned the Government to raise its prices to meet the prevailing prices from the other sources of supply in the district, and the price of Government power was raised to meet this just demand.

Prices were once more back on the old, high level prevailing before the termination of the tenure.

But the consumers had become educated by all these experiences to a better understanding of the economic questions involved. They had discovered the true cause of the high prevailing prices for power. They became convinced that the projectors were justified in making the heavy amortization charge, and they realized that if water-power plants were to be built, and at the end of 50 years turned over to the Government, that the consumers of power in the district were the ones who would really pay for the gift, not the projectors. They therefore petitioned Congress to take action to remove the justification for the heavy "amortization" charges, suggesting that the tenure of all water powers be made unlimited if the grantee would take the form of a public-service corporation and become subject to the regulation and control of Government in all matters affecting the public interest.

This is the history that we hope will never really be written. It would be a colossal mistake to require the consumer of power to endure many years of excessive rates only to find in the end that the sacrifice had been in vain and that the remedy (Government regulation) that finally had to be applied to prevent the creation of a greater evil (viz, discriminating rates) was a remedy that if employed in the beginning would have prevented any abuse either to the consumer or the projector.

But side by side with this history, which relates to water powers only that are so favored by nature and so located that the traffic would bear the necessary amortization charges, there may be written the uneventful history of many other sites which, because they were not so favored as to be able to support heavy amortization charges, never reached the developed stage.

The limited-tenure policy will, of course, end the possibility of any profit, reasonable or unreasonable, to the projector after the expiration of the 50-year tenure, and will increase the physical assets and taxing power of the Federal Government, but it will not prevent the projectors charging all the "traffic" will bear during the tenure period unless the principle of Government regulation is effectively applied. In applying the principle, however, the regulating authority is bound to recognize the justice of the projectors collecting from the consumers of power a heavy "amortization" charge, a charge that would be almost unnecessary if the tenure were unlimited.

Without the application of the regulating principle the consumer had a right to feel that the projector will charge, under the existing limited tenure policy, all the "traffic" will bear, and it can be but a small satisfaction to the consumer to know that the projector will not be able to keep it all, but will be forced to divide the spoils with the Federal Government. The consumer is not so much concerned with what is done with the money he pays for power as he is in how much he pays for power. His primary object is not to prevent the projector from becoming enriched by what the consumer pays, but to see that he pays no more than is reasonably necessary for the service rendered.

The limited tenure policy as expressed in the existing Federal legislation and regulations is, to a certain extent, an effective weapon, but a very crude one to limit the profits of the projectors of water power.

There are two general methods of limiting the profits. One is to apply the principle of regulation downward; the other is to leave the price unrestricted

but to increase the cost to the projector of conducting his business. The limited-tenure policy partakes of the nature of the latter remedy.

The consumers are not particularly interested in reducing the profits of the water-power projectors except as such reduction of profits brings about a reduction in prices to them. For the Federal Government to lay a tax of $12.50 (see p. 9) per delivered horsepower per annum would, it is true, under a system of charging what the "traffic" would bear, reduce by $12.50 per horsepower year the profits of the projectors. It would not, however, benefit the consumer, who ultimately pays the tax, except to that infinitesimal extent that he is one of 100,000,000 people and is a part owner of the $12.50 paid into the United States Treasury.

If the traffic will not bear $12.50 per horsepower per annum tax to the Federal Government, then the "average" water power will not be developed under the 50-year tenure, and the man who wants to use power in this district suffers, but the exceptional water power may be developed under that policy.

In its practical value the argument herein presented must stand or fall on whether the "amortization" charge herein referred to is academic or substantial in its proportions, or whether the collection of a just "amortization" charge would work a fancied or a real injury to the consumer.

To determine what this just "amortization" charge should be per horsepower year we must make certain assumptions regarding the cost of the development and the equivalent amortization period. While it is extremely difficult to generalize on this subject, there would seem to be introduced no substantial error if we assume the following as the conditions under which the "average" water power would have to be developed under present Federal legislation.

Average cash cost of hydroelectric plant per wheel horsepower installed	$100.00
Average cash cost of hydroelectric plant per wheel horsepower delivered to consumer	$160.00
Average cash cost of high-tension transmission line, substations, local distributing circuits, apparatus, and appliances per horsepower delivered to customers	$160.00
Total average cash investment per one horsepower capacity delivered to customers	$320.00
Price received for bonds from original underwriters in an open and competitive money market, per cent	.80
Face value of bonds issued per horsepower of delivered capacity including distributing system	$400.00
Term of bonds on which financed, years	30
Equivalent period during which full output of plant is sold prior to maturity of bonds, years	20
Annual tax necessary to be added to the power rate to enable the bonds to be retired at maturity and the plant to be presented to the Government at the end of the tenure, horsepower per annum	$12.50

There may be well-informed persons who may hold different views as to the accuracy of the assumptions that have been made, and upon which the extra charge of $12.50 per horsepower per year is predicated, but no well-informed person could hold ideas as to their modification which would reduce the resulting annual amortization charges to a figure so low that it would not remain a substantial burden to consumers and serious check to the conservation of the water-power energy now going to waste.

To test this theory, let any well-informed person make his own assumptions as to the cost of property, etc., and let him calculate therefrom his own annual "amortization" charge or tax on the "average" water power.

The foregoing analysis seems to point clearly to the conclusions:

(a) That the limited-tenure policy as applied to water powers does not offer a satisfactory solution of the question that confronts me.

(b) That it is wrong in principle.

(c) That, if adhered to, it will, because of long years of injustice to the owners of power, lead inevitably and by the petition of the consumers themselves to unlimited tenure under Government regulation.

(d) That the public interest requires, under effective governmental regulation, either an unlimited tenure or a long term fixed tenure, indeterminate thereafter, at the option of the Government; the entire property and business to be taken over and paid for by the Government upon the termination of the grant.

STATEMENT OF MR. H. L. COOPER, OF NEW YORK, N. Y., A CONSULTING ENGINEER ENGAGED IN THE BUILDING OF WATER POWERS.

The CHAIRMAN. Give your name, residence, and occupation to the stenographer.

Mr. COOPER. Mr. Chairman, and gentlemen of the committee, I am a consulting engineer engaged in the building of water powers and would like to talk to you for a very few minutes, based upon 22 years of continuous experience in finding water powers, designing them, building them, and financing them.

I have had the pleasure of listening for four days to the presentation of the different views before this committee. I have no set remarks to offer, only some observations to deliver in an informal way; and the first observation that I have is that it has been with a feeling of pleasant surprise to observe the deep interest that the committee is taking in this question. Because from my knowledge of the subject I am of the opinion that there is no subject of more importance to the American people than a correct understanding of this whole water-power question.

I have been informed by the chairman and by various members of the committee that what the committee is seeking are facts, and that after they get the facts they will then be better able to judge as to what kind of legislation should be passed.

Before I go into a brief discussion of some facts which I want to present to you, I desire to say one word about a question that was brought up in the hearing yesterday with reference to the relationship that exists between the department heads in the various Government departments and the chiefs of the departments. I have never had the pleasure of knowing very many of the heads of the departments, but I have been before the department heads themselves for about 10 years, notably in the extensive dealings that we had when we built the Keokuk Dam across the Mississippi River at Keokuk, Iowa. But I want to say that in all of these 10 years I have never found at any time any disposition on the part of any Government official—appointed or otherwise—to be unjust or biased or in any way to take any unnatural or abnormal view of anything whatever.

Senator CLARK. May I ask a question there?

Mr. COOPER. Yes, sir.

Senator CLARK. I understand that you were the engineer in charge of the work on the Keokuk Dam?

Mr. COOPER. Yes, sir.

Senator CLARK. Let me ask you whether or not that dam dealt with anything except navigable waters and privately owned lands?

Mr. COOPER. Navigable waters and a large lot of privately owned land.

Senator CLARK. Yes. But what I want to get at is this, that the construction of that dam would not occur in any way under this bill that is now before this committee, would it?

Mr. COOPER. Well, it might, if the question of public lands had to do with navigable streams.

Senator CLARK. But are there any public lands at Keokuk?

Mr. COOPER. No.

Senator CLARK. And there are no waters at Keokuk with which you dealt except the navigable Mississippi?

Mr. COOPER. That is correct.

Senator CLARK. Then it occurs to me that the Keokuk Dam and the proposition connected with that would come directly under a power bill which is now being considered by another committee of this body.

Mr. COOPER. Yes.

Senator CLARK. And that this bill which we are now considering deals only with nonnavigable waters where public lands are concerned as possible power sites.

I just want to make that clear before you go on.

Mr. COOPER. I was not going to dwell on the Keokuk Dam. That is all I want to say on that proposition, that my experience here in Washington with officials generally has always been that they were of a most fair character wherever they have been found.

Senator NORRIS. I do not care to do it now, but some time, without interrupting you, I do want to ask some questions about the Keokuk Dam.

Mr. COOPER. I will be very glad to answer them, Senator Norris.

Senator SMOOT. In this connection, Mr. Cooper, may I ask whether you have had any connection whatever with developing power in the West where public lands were involved and you were compelled to get a permit from the department here in Washington?

Mr. COOPER. Only as a consulting engineer, where other interests secured the permit.

Senator SMOOT. But you have never tried to develop one, nor to secure the money for the purpose of developing any such power?

Mr. COOPER. No; I do not think I would under the present circumstances try that.

Senator SMOOT. Nor have you in the past?

Mr. COOPER. No.

Senator ROBINSON. May I ask you, in that connection—if this law is passed would you take a lease under it?

Mr. COOPER. I would, under certain amendments which I have prepared and which I would like to offer for the consideration of the committee.

Senator NORRIS. In connection with the Keokuk proposition, you did deal with the Government officials a great deal, did you not?

Mr. COOPER. Yes, sir; over a period of about 10 years.

Senator SMOOT. You were dealing with the War Department officials, however?

Mr. COOPER. Entirely.

Now, one of the first things I want to say about this whole water-power proposition is that with respect to water-power development per se, if you please, there is a great deal of misinformation abroad in the land, and I do not, for the life of me, understand why some of these having important facts connected with the water-power business have not laid them before this committee, because these facts have a great deal to do with the form of this bill.

The first thing I want to say with respect to the water-power business in general is that it has suffered greatly in respect to profit from two very great opposing natural difficulties. The first difficulty

of these having important facts connected with the water-power

culty is that the water-power business, as applied to hydroelectric work, is a new art, not scarcely over 20 years of age. I want to present to this committee the fact that within the last 10 or 12 years more than 600,000 horsepower, built upon navigable streams and upon public-land permits, has been a distinct and absolute failure from a financial standpoint to the extent that the parties who put their money in these several investments can not again be appealed to to go into similar investments.

In the hearing before the Committee on Interstate and Foreign Commerce I gave a list of these powers, but I am not going to trouble this committee with reenumerating them. I will tell you, however, that on page 27 of the report you can find a list and you can investigate to your heart's content and see whether this important statement of mine is a fact.

Senator NORRIS. If the witness is willing, I would like to have him incorporate that list in the hearings here.

The CHAIRMAN. All right. Hand it to the stenographer, Mr. Cooper, and it will be incorporated in the record.

Senator NORRIS. I think it would be important to have that list in.

The CHAIRMAN. That will be done.

Mr. COOPER. I will hand it to the stenographer before leaving, in order that the record may be complete.

The CHAIRMAN. Yes; if you please.

(The list referred to above is as follows:)

Partial list of water-power developments which have been either through receiverships or proved bad investments.

	Horsepower.
Hudson River, Spice Falls, N. Y., Mechanicsville, N. Y	52,000
Michigan Lake Superior Power Co., Sault Ste. Marie, Mich	23,000
Great Shoshone & Twin Falls Water Power Co., Pocatello, Idaho	10,000
Animas Power & Lighting Co., Durango, Colo	4,500
Central Colorado Power Co., Denver, Colo	40,000
Wisconsin Railway, Lighting & Power Co., Hatfield, Wis	8,000
McCall Ferry Power Co., McCall Ferry, Pa	80,000
Hanford Irrigation & Power Co., Priest Rapids, Wash	4,000
Yadkin River Power Co., Rockingham, N. C	25,000
Hauser Lake (Mont.) Power Co	15,000
Chattanooga & Tennessee River Power Co., Chattanooga, Tenn	40,000
St. Lawrence River Power Co., Massena, N. Y	60,000
Austin Dam, Tex	25,000
Stanislaus Electric Power Co., San Francisco	50,000
Whitney plant, on Yadkin River	20,000
Miscellaneous small water powers	50,000
Alabama Power Co	70,000
Appalachian Power Co	40,000
Total	616,500

Mr. COOPER. The fact that there are some 600,000 horsepower that have been mistakes and failures means that in the vicinity of about $125,000,000 have been sorrowfully invested. Now, in any new enterprise you can not invest $125,000,000 and have it come out a failure without making it exceedingly difficult to get money for new enterprises, whether they are on public lands or whether they are on navigable streams.

Senator NORRIS. Have some of these investments been successful?

Mr. COOPER. Not in this list I am talking about. In general, the water-power investments have not been a success up to date.

Senator NORRIS. Do you know of any that have been successful?

Mr. COOPER. I may say very few. I would hate to mention them.

Senator NORRIS. If there are those, I would like to have a list of them also.

Mr. COOPER. I will try to make up a list and put it in the record.

Senator CLARK. When you say "successful" do you mean they are returning a present dividend?

Mr. COOPER. No; not that they are returning a present dividend. Most of them in the list I will submit have gone through the hands of a receiver.

Senator CLARK. That is what I want to get at.

Mr. COOPER. That is the fact.

Senator CLARK. Because I presume some of them which have not yet returned a dividend may be successful in being able to return dividends shortly.

Mr. COOPER. Yes.

Senator NORRIS. Some railroads have done the same thing, and yet the railroads are successful. It may be that some of these that have gone through the hands of a receiver have gone through for the same reason some of the railroads have—because of a lot of financial legerdemain by which the investors have been skinned.

Mr. COOPER. I am glad you brought up that question, because the next thing I am going to say will probably answer that. The most rigid scrutiny you can make of this list will show that the failures have not come about from the financial legerdemain you speak of, but the honest mistakes of the engineers, to a very large extent. Now, I am an engineer and it is not a very pleasant thing for me to say that these difficulties have come about through the mistakes of engineers, but that is the fact. The mistakes were honest mistakes in most all of the cases and they included misestimates, if you please, of the quantity of water in most cases, running all the way from 30 to 200 per cent. And then the plants always cost a good deal more than the engineer told the banker they would cost, with the result that the financial showing is rarely half as good as what the engineer promised at the outset.

Senator CLARK. I think it is reasonable to conclude that is the case, because in connection with the Government irrigation work I know of not one but that vastly exceeded the engineers' estimates.

Senator THOMAS. The same is true of architects, also.

Senator NORRIS. And the same thing is true in building a corncrib.

Mr. COOPER. I am glad of that, because the corncrib helps us out there.

Senator NORRIS. I believe that some of that has come about because of things that were unforeseen and that the engineer could not be expected to foresee—in other words, because of the cost of material, the cost of labor, and the high cost of living, that has been constantly going up.

Senator THOMAS. Another thing would be the physical obstacles that could not be foreseen.

Senator NORRIS. Exactly—physical obstacles that could not be foreseen, as Senator Thomas says, and which, perhaps, even God himself could not foresee. And it is safe to say that difficulties of that kind will always be encountered. But the engineer, in his esti-

mate, adds some per cent to the cost, does he not, to cover those contingencies? Because everybody knows they are going to run on to something, somewhere, which has not been foreseen, and that it is going to cost some money.

Mr. COOPER. Yes. But the trouble with that per cent, Senator, is that we never get it big enough.

Senator NORRIS. Probably.

Mr. COOPER. And as a result of the difficulties I have just enumerated, hydroelectric securities are very unpopular in our American market, so much so that the market we can reach is constantly becoming more limited in area. In this connection it might also be said that up to within the last three or four years we have been able to sell a large amount of hydroelectric securities in Europe, but the war has of course closed this field completely. It might be interesting to know that in the financing of the Keokuk enterprise practically all of our $16,000,000 of bonds were placed abroad, because we could not place them in this country. I think you will agree this is a very good reason for placing them abroad.

The foregoing will give you a general idea of the first difficulty I mentioned.

Now, the next difficulty in the way of water-power investments to which I want to call your attention is the very serious one of competition from stream, and this competition is entirely normal and sane and legitimate. It is a competition that can not be regulated and probably never will be regulated and should not be regulated. Nevertheless it is a physical fact that the water-power engineer has everywhere met each six months with some new invention that is bringing down the cost of steam power, against which the water-power engineer's product has to compete.

On the question of capital investment, which was touched on here yesterday, when I first went into this business $125 was a good, fair estimate of the capital cost per horsepower for a complete steam plant, and to-day it is $40, or one-third. This question of capital cost is of most importance, because, first, in its primary effect in reducing the cost of the steam-generated horsepower, and, second, in the greater ease there is in securing money where the amount of capital required is so small an amount per unit of power.

If the steam engineers had quit their efforts in their work of reducing the cost of steam power when they reduced the cost of the installation from $125 down to $40, we would have been very happy. They have not been content in reducing the cost on the capital side, however, but have gone a great deal further and so increased the efficiency of their steam units all the way down the line that to-day the amount of coal consumption per horsepower is less than half what it was 15 or 20 years ago. Again, the steam-generating stations of to-day require much less repair, much less oil, much less labor, than used to be the case, and the total result of all of this steam competition may be boiled down to a statement that steam power, all charges paid, to-day does not cost more than 40 per cent of the same cost 15 or 20 years ago.

From this statement you will see that the water-power engineers, all through a campaign of acquiring knowledge of a new art, have been compelled to compete in a striking degree with an art that has had 100 years of experience behind it, and we certainly have been put to it in a very severe degree.

Senator CLARK. During what period has that reduction been going on?

Mr. COOPER. For about 15 years.

Senator NORRIS. That is is exceedingly interesting, and I want to ask you what reduction, if any, during the same length of time, has there been in the ordinary cost of developing water power?

Mr. COOPER. That has gone in the other direction, unfortunately.

Senator NORRIS. That has gone up?

Mr. COOPER. Yes, sir.

Senator NORRIS. Have there been any inventions in that line that have had a tendency either to decrease the cost or improve the quantity of energy?

Mr. COOPER. No, sir. The inventions have been very considerable in water power, but they have been more in the direction of improvements in operation rather than a decrease in cost of construction.

Senator SMOOT. Another thing in that connection is this, that the water powers that were cheaply developed were the ones that were taken first?

Mr. COOPER. Yes, sir.

Senator SMOOT. And now they will grow more costly as they become less in number?

Mr. COOPER. Yes, sir.

Now, the question arose yesterday of how much it cost to develop a water power. Manifestly it is impossible to say exactly what those costs are, but my observation is that the water powers of the United States that have to compete against this $40 capital cost of steam have been constructed at about an average cost of $160—real dollars. And whenever I use in these remarks the word "dollar," I mean a dollar, instead of stocks, bonds, or anything of that kind. I mean a real dollar.

Senator CLARK. I suppose your development there at Keokuk is one of the largest of any, and perhaps you will get as much for your dollar as in any other of the large enterprises. Can you tell us, or do you care to tell us, what the cost per horsepower has been there?

Mr. COOPER. I am perfectly willing to tell you. The present cost of what we have installed is about $175 per horsepower.

Senator CLARK. What is the capacity of that plant?

Mr. COOPER. One hundred and twenty thousand horsepower. And when we get it all sold and develop the balance the cost will be about $120 per horsepower.

Senator CLARK. Your entire capacity?

Mr. COOPER. Yes; $120.

Senator THOMAS. You mean cost of production?

Mr. COOPER. No, sir; I mean capital cost, which has to be compared to the $40 cost of steam.

Senator THOMAS. Why does the capital cost decrease as your output increases?

Mr. COOPER. Because in any water power you have to build a great deal of construction work for the ultimate installation at the time you are putting in your primary installation. For instance, your dam has to be just as long and has to be completed clear across the water for 50,000 horsepower, even if you are going to get ultimately

100,000 horsepower. And it is the same for all the other items of the development.

Senator THOMAS. I understand that. But I do not understand how you decrease the capital cost as you increase the output.

Mr. COOPER. Because it increases the horsepower.

Senator NORRIS. He is talking about the cost per horsepower.

Senator THOMAS. I understand that he is talking about the horsepower; but, for instance, take this case: If John Smith has $100,000 invested in a department dry-goods store, I do not see how his cost is any less or in any way affected by the amount of his annual sales. He has that much money invested.

Mr. COOPER. No; because if he does more business in the same shell, then his cost of selling is less.

Senator THOMAS. The initial cost is the same then, and the cost of horsepower depends on the amount of your output?

Mr. COOPER. No; not at all. I will explain, in the case of the Keokuk Dam we have about 120,000 horsepower capacity installed now, and that has cost us about $175 per horsepower. Now, to complete that so that we can develop 200,000 horsepower will only take a sufficient amount of money to bring that down to about $120 per horsepower.

Senator THOMAS. In other words, you add to the cost of your installment, and the increase of the unit horsepower decreases the cost per horsepower?

Mr. COOPER. That is the idea exactly, sir.

Senator THOMAS. All right, I understand you now.

Senator SMOOT. Do you remember what the cost per horsepower was at the great Niagara plant?

Mr. COOPER. I happened to build one of the largest plants at Niagara Falls, and those plants all widely differ in their construction and occupy widely different conditions at the river; but the average cost there is about $110, taking everything they have spent up to date.

Senator SMOOT. And that, I suppose, is about the cheapest that there is constructed anywhere in the United States?

Mr. COOPER. Yes; it is one of the models.

Senator SMOOT. I understood it was between $120 and $125, taking all the plants together.

Mr. COOPER. I think some recent extensions over there would bring the average cost down to $110.

Now, then, as applied to this public-lands question, the laws for the water power to be developed on the public lands, in my humble opinion, should be based upon and take broad cognizance of these two conditions I have mentioned: First, the unfortunate amount of difficulties we have run into in the past with engineering mistakes and the consequent cost; and, secondly, this ever-increasing competition from steam. Unless we can get a very plain recognition of those difficulties we have run into in the past with engineering mistakes and we won't be able to do anything on water powers at all.

If you find I have in the foregoing stated the plain truth, then certainly the new legislation should not hamper us in any way, but should help us to the utmost if the public interest is to be served to the utmost. If the statements I have made are true, then practically all that has been said by the theoretical conservation-

ists is sadly out of place and opposed to the public interest. If a word of what I have uttered is untrue, then I hope you will disregard all of my testimony and decline to hear me at any time in the future. You may, if you choose, consider this a challenge to those opposed to a broad water-power policy from the Federal Government to either disprove what I have said or admit they have been unfair, and I believe that it is not in the public interest to continue an unfair campaign any longer.

Senator CLARK. May I ask you a question right there?

Mr. COOPER. Yes, sir.

Senator CLARK. Your Keokuk proposition is located, as I understand it, adjacent to a very large coal field, and consequently the cost of fuel ought to be very reasonable there?

Mr. COOPER. It is very small; yes, sir.

Senator CLARK. Do you know what it costs to develop a horsepower by steam in that locality?

Mr. COOPER. I think the average cost through that locality would be somewhere in the vicinity of $24 or $25 by steam.

Senator CLARK. Just as a commercial proposition, what considerations led you to install a water power there?

Mr. COOPER. Because I believed I could sell cheaper than $25.

Senator CLARK. You proposed to make up, then, by economy in operation the excessive cost of your installation per horsepower?

Mr. COOPER. Of operation; that is it exactly.

Senator NORRIS. While you are on the subject, just tell us about it. What are the facts? Have you been able to do that, and can you and do you, at Keokuk, compete successfully with coal now, notwithstanding where you have to sell your energy?

Mr. COOPER. The best answer to that is that we have sold about 95,000 horsepower.

Senator NORRIS. For what purpose? Give us an idea.

Mr. COOPER. For all generating purposes. We are at this time furnishing power for all of the street cars and most of the electric lighting in St. Louis, and we are operating the utilities in Burlington and Quincy.

Senator NORRIS. That is, for electric lighting and street cars?

Mr. COOPER. For electric lighting and street cars, and all the power used there, of course, comes from Keokuk. But down at Hannibal there is a cement company using our current, because it is cheaper than steam, even with the cheap price of coal that prevails there.

Senator NORRIS. Do they use it for heating purposes?

Mr. COOPER. No; it is not possible to use the power for that purpose.

Senator CLARK. What do you receive per horsepower?

Mr. COOPER. Our price to St. Louis is $18 a year.

Senator NORRIS. To whom do you sell; to a distributing company?

Mr. COOPER. We sell to a distributing company, which sells to those public utilities. That is a distributing company which I scarcely know anything about.

Senator NORRIS. You do not know the price at which they sell or what they make out of it?

Mr. COOPER. I do not. They had to spend a very large amount of money, I know, in order to receive our current and take it into the city. We deliver it about 10 miles outside of the city.

Senator CLARK. The distributing company is not in any sense a subsidiary or allied corporation?

Mr. COOPER. No; not in the slightest. We do not own a dollar of their stock.

Senator NORRIS. It is not a municipal corporation?

Mr. COOPER. No, sir.

Senator NORRIS. Do you know what the consumers have to pay in St. Louis?

Mr. COOPER. I have no knowledge of that, sir.

Senator NORRIS. You say you are selling to the municipality operating street cars and electric lights. There must be a great difference between the peak load and the minimum amount they take daily, is there not?

Mr. COOPER. Yes.

Senator NORRIS. You sell them horsepower sufficient to carry the peak load?

Mr. COOPER. In St. Louis we do not. In St. Louis they carry their peaks by steam.

Senator NORRIS. That is the point I want to bring out. How about Burlington?

Mr. COOPER. In Burlington we sell them the peaks and everything else.

Senator HARRIS. In Burlington, then, they have to buy, in order to get enough to carry the peak load, a great deal more horsepower than they would use except during certain hours of the day?

Mr. COOPER. Absolutely.

Senator NORRIS. Do you know whether they have any sale or use for the extra energy they buy of you?

Mr. COOPER. They have no arrangement that I know of.

Senator NORRIS. I want to ask you, as an engineer—take St. Louis and Burlington as illustrations—whether the distributing company or the municipality, if they buy and distribute it, could not as a matter of fact, if economical in operation, instead of buying this power of you, afford to build and operate steam power to carry the peak? Would that not be cheaper than to buy the peak of you and not be able to sell it?

Mr. COOPER. I think they could afford to buy the peak of us, because we have a very large capacity of our own to take care of the peaks of the kind you mention.

Senator NORRIS. If that be true, then, it seems to me, you are not only competing with coal in that vicinity, but you are doing so by selling electric energy, a great deal of which must necessarily not be used at all and for which they have to pay.

Mr. COOPER. No; that is not so.

Senator NORRIS. Isn't it?

Mr. COOPER. No.

Senator NORRIS. What do they do with the extra energy in Burlington?

Mr. COOPER. Why, we give them what energy they consume and we keep the balance of it in the pool behind the dam.

Senator NORRIS. You hold it back?

Mr. COOPER. Yes.

Senator NORRIS. Then you are fixed there so that you can regulate the quantity of water that is going over the dam?

Mr. COOPER. Yes, sir.

Senator NORRIS. So that you can meet the demands of the peak and then close down?

Mr. COOPER. Yes, sir.

Senator NORRIS. Is that true, ordinarily, with water power? Do you have to spend any more there in order to be able to do that?

Mr. COOPER. Yes; we have largely increased our capacity installation cost so we can do this.

Senator NORRIS. It costs something to be prepared to meet that kind of an emergency?

Mr. COOPER. It does.

Senator NORRIS. That is a very important thing to take into consideration.

Senator SMOOT. In most of the power plants in the West, particularly where they are located on public lands in the mountains, that is an impossibility to-day?

Mr. COOPER. That is quite true.

Senator SMOOT. Your plant is located on the great Mississippi River, where it is not a question of water; it is only a question of storage?

Mr. COOPER. Yes.

Senator NORRIS. It would not be possible there if you were not prepared to meet that emergency?

Mr. COOPER. No, sir. You have special topographical conditions to meet in the situation you speak of.

Senator NORRIS. Exactly.

Senator CLARK. Senator, Senator Smoot's idea was that there is a superabundance of water to meet that condition on the Mississippi; but in our mountain streams they are developed at once to their full capacity without sufficient water even to supply the needs of the country.

Senator SMOOT. Or, in other words, the peak load to the power company in the West means a good deal more than the peak load would to your company at Keokuk, Iowa?

Mr. COOPER. That is absolutely the fact.

I have here a little picture of the Keokuk installation that might give you some idea of that pool.

While you are looking at the picture I would like to call attention to the vast amount of work in the new lock and dry dock and buildings (which is a little outside of this question) that we had to present to Uncle Sam free. It cost us about $2,000,000 to do this.

Senator THOMAS. Of course, that expense is eliminated on the public domain?

Mr. COOPER. That is perhaps so.

Senator THOMAS. Because the streams there are only theoretically navigable in order to give Congress jurisdiction of our waters, but not actually navigable.

Mr. COOPER. That is the fact.

Now, I have two or three other points which I want to bring up.

Senator STERLING. One question there.

Mr. COOPER. Yes.

Senator STERLING. Take the other cities to which you furnish power, aside from St. Louis, do you furnish direct to the municipality?

Mr. COOPER. Not in any case, but we are open to such negotiations. And I would like to say that any municipality or any person who wants to get power from this plant can do so without having to buy it from any tied-up distributing company.

Senator STERLING. In all cases it is furnished to the municipality from a distributing company?

Mr. COOPER. It happens to be that way. No municipality is in that business at this time except Hannibal, and I understand their experience with their plant is unsatisfactory and they are about to sell it.

I want now to come to the question of discussing the revocable permit, and that is a question which I want to touch on very briefly and with some feeling, because I think you agree with me that the revocable permit discussion has done a great deal to discourage investment in water powers in general.

Now you can not talk on the question of what the good faith of the Government is. On this question of a revocable permit, if you go to a banker and tell him that this permit is revocable, you can not tell him that "Never mind, the Government will always be fair," because he is frightened and will not believe you. I am perfectly willing to admit he ought not to be frightened, but he is frightened, and we are up against the condition that you have got to provide a good deal better and more stable foundation for investments than can be possibly represented by any revocable permit whatsoever.

As I understand the history of the revocable permits, they were brought out in 1901, and I have found upon going over to the Forest Service and getting some data there, which I desire to have put in the record, that from 1901 to 1909 there was about 375,000 horsepower that started out with revocable permits. I understand that a lot of those revocable permits are now in litigation, but it would not get me anywhere in my views to discuss litigation. I want to get down to some practical results.

Senator STERLING. In a general way, do you know how that litigation was started or instituted?

Mr. COOPER. I do not think I know enough about that to give you any intelligent answer at all.

I find that between 1909 and up to date there has been an abnormal reduction in the use of the revocable permit, and in the last five years there are only about 10 plants in the United States—new plants—that have been started upon revocable permits, and they have only developed about 15,000 horsepower; which means to say, from a practical standpoint, that there has been no development at all since 1909 on the public domain of new developments.

Mr. MERRILL. I would like to make this statement: I got part of this information for Mr. Cooper last night, and I am certain he does not wish it to go into the record except for just what it purports to be. There was a table prepared at the request of one of the members of the House committee of new developments that started since 1909—absolutely new enterprises on public lands. That list shows, as Mr. Cooper says, about 15,000 horsepower. Mr. Cooper was down to my office last night to get that table, and I told him that I felt

it would be of interest also, in that connection, to determine how many enerprises—absolutely new enterprises—had started on the public lands before the date of the revocation in 1909; and that is the other list which he has here and which is only partial. I looked through my records afterwards and got the remainder.

Senator THOMAS. Were started and abandoned or were started and are continuing?

Mr. MERRILL. No; started and continuing. I found afterwards that it was 325,000 horsepower. But that was not all made before 1909; a greater part of that development has been made in recent years. That is, it contains a list of those companies which had begun and made first installations on public lands under authority of the act of 1901 and who have been continuing from that date; and some of the biggest developments have been put in in the last year or two.

Senator SMOOT. Do you know how many of those developments were started before the law of 1901?

Mr. MERRILL. They were all started after the passage of the act of 1901 in the list I have given, so far as I have been able to find out, and I think that every one was started since 1901.

Senator SMOOT. Do you know of any started before 1901 that were compelled, in order to go on with the proposition, to accept the permit?

Mr. MERRILL. I can not say off-hand, Senator; but if there are such, I will attempt to get the information for you.

Senator SMOOT. You say "if there are such." You know there were such, don't you?

Mr. MERRILL. No; I am not certain, Senator.

Senator SMOOT. I can tell you of a number of them.

Senator CLARK. Mr. Merrill, may I ask you a question?

Mr. MERRILL. Yes.

Senator CLARK. I understand, then, from you that there were started, prior to 1909 and now continuing——

Mr. MERRILL (interposing). Now continuing; yes, sir.

Senator CLARK (continuing). The development of something like 300,000 horsepower?

Mr. MERRILL. Yes. This present development represents, at the present time, the development of some 58 different corporations.

Senator CLARK. Let me conclude my statement.

Mr. MERRILL. Yes.

Senator CLARK. I understand that prior to 1909 there were horsepowers started of which the then development and the development that has since occurred amounts to something over 300,000 horsepower?

Mr. MERRILL. Yes; that is correct.

Senator CLARK. But since 1909 there have been new projects started developing something like 15,000 horsepower?

Mr. MERRILL. Developing over 15,000 horsepower—absolutely new industries.

Senator CLARK. That is what I said.

Mr. MERRILL. I only wanted to make this statement because I know Mr. Cooper wants the list to go in for exactly what it is.

Mr. COOPER. Yes. The list you gave me last night was 248,000 horsepower. Then you told me this morning it was 325,000, and so in my testimony I have used the figures of 325,000. The 15,000

horsepower list since 1909, Mr. Merrill has told you is correct, and this list I now submit for use in the evidence.

(The list of horsepowers developed since 1909, above referred to, is as follows:)

Table of new water-power corporations that constructed and operated power plants on national forests since Mar. 2, 1909, and which are founded upon revocable permits.

This table shows the corporations that accepted the revocable permits as a basis for financing and were not dependent upon or extensions of other companies:

State.	National forest.	Corporation.	Horsepower
Idaho	Kaniksu	Inland Portland Cement Co	2,[illegible]
South Dakota	Black Hills	Dakota Power Co	2,[illegible]
Colorado	Leadville	Tin Cup Gold Dredging Co	[illegible]
Idaho	Lemhi	Mackay Light & Power Co	[illegible]
Nevada	Ruby	Elko-Lamoille Power Co	[illegible]
California	Mono	Pacific Power Co	4,[illegible]
Montana	Beartooth	Cooke Mining & Reduction Co	[illegible]
Do	Madison	Montana-Illinois Copper Mining Co	[illegible]
Colorado	Sopris	Colorado Yule Marble Co	1,[illegible]
Do	do	Tam O'Shanta-Montezuma Mines & Development Co.	[illegible]
Arizona	Tonto	Arizona Power Co	3,[illegible]
Idaho	Salmon	Kittie Burton Gold Mines Co	[illegible]
Total			15,[illegible]

NOTE.—This data is copied from the hearings on the water-power bill before the Committee on the Public Lands, page 404, and the quantities of power given are supplied by Mr. Merrill, of the Forestry Department.

Mr. SAMUEL HERRICK. I would like to suggest to the committee, if I may, that prior to 1909 the general opinion was that, although those permits were revocable, the department would not revoke them except for good cause and upon notice, and the most of the plants were put in with that idea. In 1909 they were revoked without any notice whatsoever and without any statement of cause.

Senator SMOOT. Some forty-odd of them by the then Secretary of the Interior, Mr. Garfield?

Mr. HERRICK. Yes, sir; without any preliminary notice whatsoever or any chance to be heard. That may explain why since 1909 there have not been any new plants started.

Mr. COOPER. I was just coming to that feature. There must be some reason for this striking falling off since 1909.

In concluding on this phase of this subject I would like to call your attention to the fact that outside of the public domain since 1909 over 700,000 horsepower has been built as compared to this 15,000 on public domain in the same period.

Senator STERLING. Where for the most part, Mr. Cooper, has this 700,000 horsepower been developed?

Mr. COOPER. It has been all over the United States. There has been no particular district, so far as I know, that you could quote. They have been in the South, the East, and the West, and most particularly in the South, East, and Middle West.

The next thing that I want to call to your attention is this: That this action about which the gentleman has spoken to you, of having all these permits canceled without any notice, and the difficulties with steam and with estimates, and all that sort of thing, have combined

to create a condition where we must have real help in the legislation. And if I could write this bill, the very first words I would use in the bill would be: "That in order to encourage the development of water power the Congress of the United States does decree" in order that we could have something to show the banker that the disposition down here has reversed; that if there was any opposition heretofore to water power, Congress was now trying to help develop it; and it would give us something to encourage the banker so that he would put his money into these investments.

Manifestly the most important thing in all of these investments is the ability to get cheap money, because the consumer has to pay for the extra money and the quantity of development is reduced by expensive money.

Senator THOMAS. Do you think a congressional expression of that kind would loosen up the purse strings?

Mr. COOPER. I could talk to some of the old-type fellows on such a clause as a text for two hours and help out a lot.

Senator THOMAS. I am willing to do anything that will loosen up the purse strings.

Senator SMOOT. You put a list in here, as I remember, showing 10 water-power companies that had been developed since 1909?

Mr. COOPER. Yes.

Senator SMOOT. Does it show where they were located?

Mr. COOPER. Yes; and it is a very peculiar list. It is all out in the West, and most of it is 300 horsepower units for private use. There are practically no public utilities in this list at all. The public generally, as we speak of the public, are getting no benefit from this 15,000, even. And that list will be in the record.

I just want to say one word or two about conservation. Now, I do not want to be understood as criticizing anyone's views on conservation, but I want to place this one proposition before you about conservation, and that is that water-power development is the most real conservation that is walking abroad in this land to-day. Every time you develop a horsepower you save about 10 tons of coal per year for other uses of civilization. It was testified here yesterday, I believe, that Government records showed that there were some 60,000,000 still to be developed within the borders of the United States. I do not know whether it is 60,000,000 or not, but let us suppose it is a quarter of that amount, and we will call it 15,000,000 horsepower that is still to be developed. And if my formula of 10 tons of coal per horsepower used is correct, that means that if you can speed the day when this 15,000,000 horsepower is available it will save 150,000,000 tons of coal per annum, which would be worth about $300,000,000. I want to present a homely idea to this committee, which is this: Suppose instead of trying to conserve this $300,000,000 worth of coal that we had a huge pile of coal out on the prairie somewhere and we were burning it, literally burning it, destroying $300,000,000 of our absolute value every year. How long do you suppose it would take this Congress to frame us a bill that would allow somebody to go out there and put out that fire?

That is exactly where we are to-day in reference to all this conservation and the necessity to get legislation which will amount to something and give us a chance to really develop these powers along sane lines.

I want to discuss only, in conclusion—you will see I am a good deal like a preacher, I seem to have a good many "in conclusions"—some brief statements or some amendments which I would like to see in this bill.

Amend section 1 of the act by adding, on page 2, line 18, after the word "purposes," the following:

And provided, That in granting leases where there are contesting applicants for leases for the same property, the Secretary of the Interior may, in his discretion, give preference to that applicant who has first previously obtained from the State or Federal Government authority for work in connection with the project or has undertaken the greatest amount of preliminary work thereon, provided that the plans of such applicant propose to make a development of the power that is as useful and as efficient as those of other applicants.

Senator NORRIS. You want to put that in place of the proviso which is in the bill?

Mr. COOPER. Yes.

The object of this amendment is to give a preference to a man who has been first in the field if he can make as good a development as anyone else.

Senator CLARK. Does your provision do that?

Mr. COOPER. We think it does.

Senator CLARK. That it gives him the right to do that?

Mr. COOPER. We say in this preamble here that we will be very glad to see that provision made mandatory.

Senator STERLING. You say, "in his discretion"?

Mr. COOPER. Let me read my comment on that:

It is probable that there will be contesting applicants for leases of the same property. The act contains no provision establishing any principle by which the Secretary of the Interior shall decide between them, and he may give the lease to any applicant he chooses.

Preliminary work has been commenced on many projects. In some cases State and Federal acts have been obtained, applications for water appropriation under State laws made, plans prepared and land acquired, but no development has been possible, because it was necessary to occupy public lands and no satisfactory authority could be obtained. These projects have become known. If this bill passes, a successful application might be made by one who has done no work on the project, but has had it brought to his attention through the efforts of the original pioneer. It would be manifestly unfair to permit the late comers to deprive those who were first in the field of the fruits of their work. This section might well be made mandatory instead of discretionary.

Senator CLARKE. I do not see where this section, as you give it, gives the Secretary of the Interior any authority he does not now possess by virtue of his office.

Mr. COOPER. It is simply an outline of a policy, as an expression of a policy that Congress wants him to follow.

Senator CLARK. That is true.

Mr. COOPER. Our next suggestion is to amend the act by adding after section 6 the following:

In the event the United States does not exercise its right to take over the properties as provided in section 5, and a renewal to the original lessee is not made by agreement, and no lease is made of the properties to a new lessee who is obligated to pay therefor as pro-

vided in section 6, then the lease shall continue in existence on the terms and conditions in force at the time fixed for its expiration, until such time as the property is taken over by the United States in section 5; or by a new lessee as provided in section 6; or the lease is renewed upon terms agreed upon.

Senator ROBINSON. That is designed to prevent a hiatus while the plant was in operation?

Mr. COOPER. Yes, sir. That subject has been so thoroughly thrashed out here I am not going to take the time to read our arguments on that point, because they are exactly what everybody else has offered.

Now, coming to section 2, amend section 2 by striking out the last word in line 11, "output," and substitute therefor "ultimate capacity."

The word "output" may mean power actually sold or power available for sale. If it means the former, no power plant can start up unless it has two customers, for more than 50 per cent of its output would be sold to one customer if it has but one. In many instances it is necessary to secure one large customer for a term of years for a considerable amount of power before the development can be financed. The amendment as suggested is simply to make it clear that "output" means ultimate capacity, which it is believed is the intention of Congress.

Senator CLARK. That would be all right where it had a large water power, a superabundance of water supply, and a uniform water supply; but where your operations are confined to a stream where the water supply is limited and where the installation is for the purpose of furnishing, in the first instance, an amount of power to some particular industrial works, that will perhaps consume 75 per cent of the possible capacity, the provision as you have it would cut off the possible erection of a plant there.

Mr. COOPER. I have another provision that takes care of just your point, on the next page.

Our next suggestion is to amend section 2, after the word "time," in line 9, by inserting the following: "Except with the consent of the Secretary of the Interior."

It is believed there undoubtedly will be cases where the public interest will be best served by selling all the energy to one source of consumption, and that the Secretary of the Interior should be given the power to act in that event.

That takes care of the point, I think, you have just made, Senator, that the Secretary, in his discretion, may change that 50 per cent.

Next we suggest: Amend section 4 by striking out everything after the word "however," in lines 10, 11, 12, 13, and 14 down to the words "the lessee," and substituting the following:

That a lessee may create a lien upon the power project developed under permits issued under this act by mortgage or trust deed, including therein the rights granted by any lease hereunder when approved by the Secretary of the Interior and for the bona fide purpose of financing the business of the lessee.

My note on that is that in order to raise funds for power developments it is necessary to issue bonds secured by mortgage and include the necessary rights in the securities. This necessity is recognized by the act, which undertakes to confer authority to do so. The authority, however, is implied from the negative language in the act,

I want to discuss only, in conclusion—you will see I deal like a preacher, I seem to have a good many "in some brief statements or some amendments which I in this bill.

Amend section 1 of the act by adding, on page 2, word "purposes," the following:

And provided, That in granting leases where there a for leases for the same property, the Secretary of the cretion, give preference to that applicant who has from the State or Federal Government authority f the project or has undertaken the greatest amount o provided that the plans of such applicant propose the power that is as useful and as efficient as thos

Senator NORRIS. You want to put that which is in the bill?

Mr. COOPER. Yes.

The object of this amendment is to g who has been first in the field if he can as anyone else.

Senator CLARK. Does your provision

Mr. COOPER. We think it does.

Senator CLARK. That it gives him t

Mr. COOPER. We say in this pro glad to see that provision made

Senator STERLING. You say, "in

Mr. COOPER. Let me read my

It is probable that there will of the same property. The ac any principle by which the S between them, and he may give

Preliminary work has been cases State and Federal act water appropriation under S acquired, but no developme sary to occupy public lan obtained. These project a successful application on the project, but has efforts of the original permit the late connec of the fruits of their w tory instead of disc

Senator CLARK. I gives the Secretary possess by virtue of

Mr. COOPER. It of a policy that

Senator CLARK.

Mr. COOPER.

after section 6 t

In the event t over the prop original lessee properties to a

sure that in the the West many, e irrigation and develop any land the power for so to take your chance y at all, or what the

ght mention, for in- ll be just as impor- er, that the Secretary cretion of making con- greater period than 50 y, or either one, as the that if they find it is

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ase, of encouragement to business.
think it would aid this bill, or make it any
a provision put in here that where less than
nvolved is Government land it will not be
of this bill except that it shall pay a reason-
s for that negligible quantity of public lands?
doubtful about that. I would like mighty well
r the settlement of the Government's fee decided
e smallest amount is the thing that is in the inter-
er.

. Do you not think that if it is right to charge for
the public lands it is just as right to charge for 5?
e is exactly the same.

. I do, Senator. I really think so. But I will tell you
er people feel about this thing. I am here representing
n organization I have built up during 22 years, and we
ll tired out waiting for something to happen. Settle this
amongst yourselves, only give us your decision quickly and
table terms.

ator THOMAS. Mr. Cooper, have you given any consideration
er to the idea of transferring these reserve power sites to the
tive States where they are situated to be used in conjunction
the water which they already own?

Mr. COOPER. Yes; I have thought about that a great deal, Senator.

Senator THOMAS. I would like to have your view about that par-
ar feature of it, if you are prepared to give it.

Mr. COOPER. I think, as far as I am concerned, it does not make any
ference. There is a big argument against either plan.

Senator NORRIS. There might be an argument made in regard to
State transferring away rights in connection with the dam sites
together.

Senator THOMAS. They might as well do it, because if this bill
passes it will confiscate our rights, anyhow.

Senator ROBINSON. Don't be so gloomy about it, Senator.

Senator THOMAS. I am not; I am simply stating the facts as I see them.

Senator CLARK. Right you are.

The CHAIRMAN. Are there any further questions? If not, we thank you, Mr. Cooper.

Mr. COOPER. I have one further suggestion; it is as follows:

Amend the act by adding the following after section 9:

"Whenever the lands leased under authority of this act are to be utilized by the lessee for construction, maintenance, or operation of a dam located in navigable waters of the United States or for works appurtenant or accessory thereto, and the Secretary of War and Chief of Engineers shall certify to the Secretary of the Interior that such dam is or may be an improvement useful in the present or future navigation of said waters, then the lessee may acquire the right to use or damage any lands or property of others necessary to the construction, maintenance, or operation of any such dam or works appurtenant or accessory thereto by the exercise of the right of eminent domain either under the laws of the State in which such lands or property are located, or if such right can not be acquired under the laws of such State, then under the laws of the United States providing for the acquirement by condemnation of lands or property for the uses of navigation."

(NOTE.—The object of this amendment is to confer a very necessary power in connection with such works. It is limited to such works as may be determined by the Government authorities to constitute present or future aids to navigation owing to the serious doubts which exist as to whether the Government can authorize the condemnation of property unless the works are or may be of this character.)

(The following are the amendments suggested to the bill by Mr. Cooper, with notations:)

Amend section 1 of the act by adding, on page 2, line 18, after the word "purposes," the following:

"*And provided*, That in granting leases where there are contesting applicants for leases of the same property the Secretary of the Interior may, in his discretion, give preference to that applicant who has first previously obtained from the State or Federal Governments authority for work in connection with the project or has undertaken the greatest amount of preliminary work thereon provided that the plans of such applicant propose to make a development of the power that is as useful and efficient as those of other applicants."

(NOTE. The object of this amendment is to give a preference to a man who has been first in the field if he can make as good a development as anyone else.)

It is probable that there will be contesting applicants for leases of the same property. The act contains no provision establishing any principle by which the Secretary of the Interior shall decide between them, and he may give the lease to any applicant he chooses.

Preliminary work has been commenced on many projects. In some cases State and Federal acts have been obtained, applications for water appropriations under State laws made, plans prepared, and lands acquired; but no development has been possible, because it was necessary to occupy public lands and no satisfactory authority could be obtained. These projects have become known. If this bill passes, a successful application might be made by one who has done no work on the project but has had it brought to his attention through the efforts of the original pioneer. It would be manifestly unfair to permit the late comers to deprive those who were first in the field of the fruits of their work. This section might well be made mandatory instead of discretionary.

Amend the act by adding, after section 6, the following:

"In the event the United States does not exercise its right to take over the properties, as provided in section five, and a renewal of the lease to the original lessee is not made by agreement, and no lease is made of the properties to a new lessee who is obligated to pay therefor, as provided in section six, then the lease shall continue in existence on the terms and conditions in force at the time fixed for its expiration until such time as the property is taken over by the United States, as provided in section five, or by a new lessee, as provided in section six, or the lease is renewed on terms agreed upon."

(NOTE.—The act as now drawn provides that at the end of 50 years the Government shall have an option to take over the property or lease it to some one else, and in either case it must pay the lessee for the property. There is no provision as to what shall happen on the expiration of the lease if the Government does not choose to exercise its option; it may renew the lease, but it is not bound to; it may lease to some one else who will purchase, but it is not bound to. The lessee, therefore, faces the possibility that on the expiration of his lease the Government may refuse to buy, to renew, or to lease to anyone else; and if it takes such action he has no more rights in the matter, can be ordered off the lands, and his plant has no value except a scrap value.

Sound economic principles compel the lessee to provide for this contingency by establishing a sinking fund sufficient to amortize the total value of his property in 50 years, which can be done only out of receipts which in turn come from the consumer. This will result in forcing up prices, which the consumer will have to pay, and in some developments may raise the price to such a point that the consumer will not buy at all, and the development, therefore, will not be undertaken.

Under these circumstances a development can not be financed on sound principles without a sinking fund if the property may be rendered valueless at the expiration of the lease, and responsible bankers would not undertake it.

The amendment suggested is designed to meet this difficulty on fair terms.)

Amend section 2 by striking out the last word in line 11, "output," and substitute therefor "ultimate capacity."

(NOTE.—The word "output" may mean power actually sold or power available for sale. If it means the former, no power plant can start up unless it has two customers, for more than 50 per cent of its output would be sold to one customer if it has but one. In many instances it is necessary to secure one large customer for a term of years for a considerable amount of power before the development can be financed. The amendment suggested is simply to make it clear that "output" means ultimate capacity, which it is believed is the intention of Congress.)

Amend section 2, after the word "time" in line 9, by inserting the following: "except with the consent of the Secretary of the Interior."

(NOTE.—It is believed there undoubtedly will be cases where the public interest will be best served by selling all the energy to one source of consumption, and that the Secretary of Interior should be given the power to act in such event.)

Amend section 4 by striking out everything after the word "however" in lines 10, 11, 12, 13, and 14 down to the words "the lessee" and substituting the following:

"That a lessee may create a lien upon the power project developed under permits issued under this act by mortgage or trust deed, including therein the rights granted by any lease hereunder when approved by the Secretary of the Interior and for the bona fide purpose of financing the business of the lessee."

(NOTE.—In order to raise funds for power developments, it is necessary to issue bonds secured by mortgage and include the necessary rights in the security. This necessity is recognized by the act which undertakes to confer authority to do so. The authority, however, is implied from the negative language of the act and it would remove any possible question if the language were affirmative instead of negative, and this is the object of the proposed amendment.)

Substitute for section 7 the following as section 7 of the Ferris bill:

"That where the public interest requires or justifies the execution by the grantee of contracts for the sale and delivery of electrical energy for periods extending beyond the 50-year period herein named, such contracts may be entered into upon the approval of the public-service commission or similar authority in the State in which the sale or delivery of power is made and upon the approval of the Secretary of the Interior of the United States, or if sold or delivered in a Territory, or in a State without a regulating authority, then upon the approval of the authority under which the grant is made, and thereafter, in the event of the termination of the grant as herein provided, the United States or any subsequent grantee shall assume and fulfill all such contracts entered into by the original grantee."

Amend the act by adding the following after section 9:

"Whenever the lands leased under authority of this act are to be utilized by the lessee for construction, maintenance, or operation of a dam located in navigable waters of the United States, or for works appurtenant or accessory

thereto, and the Secretary of War and Chief of Engineers shall certify to the Secretary of the Interior that such dam is or may be an improvement useful in the present or future navigation of said waters, then the lessee may acquire the right to use or damage any lands or property of others necessary to the construction, maintenance, or operation of any such dam, or works appurtenant or accessory thereto, by the exercise of the right of eminent domain, either under the laws of the State in which such lands or property are located, or if such right can not be acquired under the laws of such State, then under the laws of the United States providing for the acquirement by condemnation of lands or property for the uses of navigation."

(NOTE.—The object of this amendment is to confer a very necessary power in connection with such works. It is limited to such works as may be determined by the Government authorities to constitute present or future aids to navigation owing to the serious doubts which exist as to whether the Government can authorize the condemnation of property unless the works are or may be of this character.)

STATEMENT OF MR. J. B. CHALLIES, SUPERINTENDENT OF WATER POWER FOR THE CANADIAN GOVERNMENT.

The CHAIRMAN. Give your name and position, and where you reside?

Mr. CHALLIES. Mr. Chairman, as superintendent of the water-power branch of the Canadian department of the interior, I came down to Washington at the invitation of the Secretary of the Interior [Mr. Lane] to explain to him and his officers the Canadian water-power laws and regulations thereunder. He has suggested that I offer to explain the Dominion water-power law and regulations to your committee, and to briefly outline the respective Dominion and Provincial interest in Canada's water powers.

The CHAIRMAN. We will be glad to have you do so.

Mr. CHALLIES. I am entirely at your disposal, and it will be a great privilege for me to serve you in any way you desire.

The CHAIRMAN. Have you a copy of your statutes on the subject?

Mr. CHALLIES. Yes, sir. In a general way we, in Canada, are situated very much like you are here in connection with the water-power question. The original confederation Provinces have control over their natural resources, as some of your older States have, and, of course, the water powers in those older Provinces are administered under regulations pursuant to acts passed by their own legislatures. The Dominion Government is interested in water powers on Dominion property in the Western Provinces of Manitoba, Saskatchewan, and Alberta, and, of course, in the water powers throughout the Dominion on navigable streams.

Senator SMOOT. Do not those Provinces claim the water within their boundaries or can the Dominion of Canada claim control of the water in those three Provinces?

Mr. CHALLIES. In those three Provinces, Senator Smoot, the ownership of the water is by virtue of dominion acts in the Dominion.

Senator SMOOT. Just the same as in our Territories?

Mr. CHALLIES. Yes; Senator Smoot. The water powers in the older Provinces—that is the Provinces that entered into confederation in 1867—Ontario, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, are administered under their own laws.

The water powers of Nova Scotia are small but important; the rivers are fairly uniform throughout the year. The powers are

practically all owned outright, and the government of the Province has little control over them, except such control as it might have through a public utility corporation or commission. The Nova Scotia government has recently organized a water-power commission for the purpose of investigating the whole water-power question there.

The water powers in New Brunswick——

Senator SMOOT. Do I understand that the Dominion Government could have a utilities commission and control the utilities of any of her Provinces?

Mr. CHALLIES. No. The water powers in parts of New Brunswick are fairly large and important, but there is to-day no adequate water-power law. Like Nova Scotia, the developed powers are all practically owned in fee. The provincial authorities are now beginning to worry about proper water-power regulations and power administration.

Senator CLARK. When that law comes, if it does come, will it be furnished by the Dominion Government or by the provincial governments?

Mr. CHALLIES. By the provincial legislature of New Brunswick. The Province of Quebec now has regulations covering water powers, but many of their most important water powers were in the past sold at auction.

The Quebec government a few years ago appointed a streams commission for the purpose of investigating and working out adequate water-power administration and control. This organization is doing excellent work of far-reaching importance.

Senator CLARK. The provincial government has done that?

Mr. CHALLIES. Yes. The powers were sold, I understand, to the highest bidder, and most of their important sites are now controlled by private companies.

In the Province of Ontario they have a very satisfactory leasing system in operation. The law there is very strict and some think very drastic. The power situation is an exceedingly interesting one on account of the great work of the Ontario Hydroelectric Commission.

Senator CHAMBERLAIN. Where these sales are made at auction, are the sales made free from any Government restriction or control?

Mr. CHALLIES. No. The leases were made on the condition that a certain amount of expenditure and possibly of development must take place within a certain time, Senator Chamberlain.

Senator CHAMBERLAIN. Is the matter of rates subject to the jurisdiction of the provincial government?

Mr. CHALLIES. In some cases yes, but in most cases no. I am not sure.

Senator CLARK. May I ask you this: In any of these Provinces which you have mentioned, which correspond more nearly to our States—in any of these original Provinces—does the Dominion Government in any way exercise authority or control over the water powers?

Mr. CHALLIES. Yes, Senator Clark, by virtue of the navigation interests.

Senator CLARK. The navigation interests; yes. That occurs in our States also.

Mr. CHALLIES. Of course there are important power developments in these older Provinces, where surplus water from canal structures is used under rights obtained from the Dominion.

Senator CLARK. Yes. But let me ask you this: Upon nonnavigable waters is any authority exercised in those Provinces by the Dominion Government?

Mr. CHALLIES. No, sir.

Senator NORRIS. You mean the old Provinces when you say that?

Mr. CHALLIES. Yes.

Senator NORRIS. As I understood you awhile ago, there are some Provinces in the western part of Canada where the Dominion Government does control.

Mr. CHALLIES. Those are the Provinces that conform to your Western States, or Territories as you call them.

Senator NORRIS. Yes; but Senator Clark mentioned "those Provinces," and I wanted to see whether you included all of them.

Senator CLARK. I understand those western Provinces correspond not to our Western States, but to our Territories.

Mr. CHALLIES. Yes.

Senator CLARK. I may be mistaken, but I understood you to say they correspond to our Territories, and that the older Provinces correspond to our States.

Mr. CHALLIES. You are right.

Senator CLARK. Each of them has a government and a sovereignty of its own?

Mr. CHALLIES. You are right, Senator Clark.

Senator CLARK. And in those Provinces, which correspond to our State governments, I asked you the question whether or not the Dominion Government exercised control or authority over the waters of nonnavigable streams?

Mr. CHALLIES. No.

Senator NORRIS. Let me ask you a question. Will the Provinces, which you say are similar to our Territories, when they become Provinces similar to our States, be empowered then to control their waters on nonnavigable streams?

Mr. CHALLIES. The Provinces of Manitoba, Saskatchewan, and Alberta are now Provinces.

Senator NORRIS. Exactly.

Mr. CHALLIES. The same as the older Provinces. They have their own provincial autonomy, but their natural resources are still retained by the Dominion.

Senator NORRIS. Then you have two kinds of government in Canada?

Mr. CHALLIES. Yes, sir.

Senator NORRIS. One in each of the older Provinces, where the Province controls entirely the water power, and the newer Provinces, where the Dominion controls?

Mr. CHALLIES. Yes, Senator Norris.

The CHAIRMAN. Mr. Challies, in those old Provinces, where they control the water power, what do they do where the development of water power must be made on lands belonging to the Dominion?

Mr. CHALLIES. The greater portion of the lands the Dominion owns in the older Provinces are ordinance properties (land which was originally held by Great Britain for defense purposes), public harbors, and the beds of navigable streams.

Senator WORKS. Are those Provinces that have now come into the union Provinces admitted by the act of the Dominion Government?

Mr. CHALLIES. Yes, Senator Works.

Senator WORKS. I suppose the enabling act, as we call it, provides upon what terms and conditions they are admitted?

Mr. CHALLIES. Yes.

Senator WORKS. And does that determine their rights over the waters of nonnavigable streams in terms?

Mr. CHALLIES. Yes.

Senator SMOOT. That is reserved to the Dominion Government?

Mr. CHALLIES. Yes, Senator Smoot.

The water-power regulations of the Dominion, which would be of most interest to your committee, as offering a situation analogous to that covered by your Ferris bill, or the regulations that have been passed pursuant to the Dominion lands act of 1908 and covering the western Provinces of Manitoba, Saskatchewan, and Alberta, I have a copy of them, and to save a detailed explanation of their provisions I would like to have them placed in your special record.

The CHAIRMAN. We would be very glad to have them.

(The regulations referred to will be found at the end of Mr. Challies's remarks.)

Senator CHAMBERLAIN. Mr. Challies, would you prefer just to go ahead and make your statement without interruption and then submit to questions by the committee?

Mr. CHALLIES. Senator Chamberlain, I am entirely at your pleasure; whatever you prefer.

Senator CHAMBERLAIN. We would like to have you make your statement in a way that would be satisfactory to you, first. At least I would be glad to have you do that.

Mr. CHALLIES. Unfortunately I am an engineer and not a lawyer, and I can not adequately explain the legal aspects of the question as I would like to. By answering your questions I could probably help you more.

Senator NORRIS. I think instead of saying "unfortunate" you might say "fortunate."

Senator THOMAS. Yes; because otherwise you might be a member of the committee. [Laughter.]

Senator CLARK. I do not know about that. The engineers seem to be having their troubles now as well as the rest of us.

The CHAIRMAN. Go ahead.

Mr. CHALLIES. I might state briefly that the natural resources of the three Provinces I have mentioned—Manitoba, Saskatchewan, and Alberta—are administered under the Dominion lands act, 1908. That act provides that rules and regulations may be passed by the governor in council covering the administration of any of the natural resources—lands, petroleum, gas, coal lands, grazing lands, and water powers. The water-power regulations, which I will place in your record, have been approved by the Governor General in council; that is, the Government of Canada. They are first submitted to the governor in council by the minister of the interior, and, after being

duly considered by the whole cabinet, are generally approved—some times, of course, with amendments. After passing council they remain in force until the first session of the Dominion Parliament following. They must be placed on the table of the house and approved formally by the House of Parliament and also by the Senate of the Dominion before finally becoming law. It works out in this way: General authority is given under the Dominion lands act to the governor in council to make regulations covering water powers; the governor in council, on the report of the minister of the interior, approves of such regulations, which thereupon become legal and enforceable, and remain in force until they are either approved or rejected by formal resolution of the House and Senate of Canada at the first succeeding session of Parliament.

Now, the particular section of the Dominion lands act (sec. 35) which authorizes our Dominion in the power regulations is very brief. It simply states that the governor in council may make regulations for the disposal of lands required for water powers and for the storage and use of water required for power developments, and declares that no land can be sold or otherwise disposed of which is valuable for water-power purposes; that such land can only be leased. Parliament has considered it essential that title must remain in the Crown and that any authority given for a power development must take the form of a terminable lease.

The regulations under this very general proviso in the Dominion lands act contemplates the submission to the minister of the interior of certain general specified data, engineering and financial information, upon the consideration of which the minister may, if he approves of the proposed project, enter into an agreement with the applicant for a power development. The minister has authority under the regulations to call for further information. He may, or he may not, grant the application. No priority of right at all is obtained by making a formal application under the regulations. Municipalities are given no legal preference whatever over a private or corporate applicant. If the minister approves the scheme, after having it investigated by his engineers, he may enter into a formal agreement. That agreement provides for four or five main things:

First, that the work must be diligently carried on according to the plans he approves of; second, actual construction work must be started within a certain time; third, a minimum amount of money must be spent each year of the agreement on actual construction operations according to the plans approved; and, finally, a minimum amount of power, to be determined by the minister, must be developed within a period not to exceed five years.

On the contractor complying with those general terms, the agreement provides that a license and a lease will be issued. They are concurrent and very largely coterminous. They run for 21 years, renewable for three further similar periods—84 years altogether.

Senator THOMAS. For how many years?

Mr. CHALLIES. Eighty-four years. At the end of any renewal period the governor in council, upon report from the minister of the interior, may take over the works upon paying for them at their actual cost, this to be decided by a board of arbitration. Provision is made for the appointment of an arbitrator, if the applicant

refuses to appoint one, by the judge of the Exchequer Court of Canada.

The license provides that the applicant must develop the power to its maximum capacity if called upon by the minister to supply a public demand up to the capacity of the amount of water granted by the license. The minister can tell a contractor that the public interest demands "that you double your capacity," and he has got to do it. If he does not, his lease and license are cancelable without any reimbursement. The power must be developed and delivered continuously. The license also provides that if the minister of the interior should at any time report that the scheme is not the best scheme for the river—that is, that it only uses a portion of the flow or of the fall of the river and that a later survey shows that three or more times the flow or fall could be used by a more comprehensive project—the governor in council can take over the works upon the payment of their value, if the owner of the license, upon being given the opportunity to carry out the larger scheme, refuses. But he is given first chance to carry out the larger or more comprehensive project.

At the end of the 84-year period the works must be taken over by the Dominion Government upon payment of the actual cost, to be decided by arbitration. There are other important and interesting features of the license which you will see in the regulations.

Senator NORRIS. Has there been any trouble about financing these various enterprises under that kind of a law and regulation?

Mr. CHALLIES. Of course, there has been trouble this last year, Senator Norris, owing to the war situation; but these regulations were not, in the first place, decided upon until certain financial people of Canada and one or two prominent financiers of the United States were given an opportunity to be heard, and until the suggestions that they offered were incorporated in the regulations.

Senator NORRIS. Then, the plan is reasonably satisfactory to the financial men, as well as to the power people?

Mr. CHALLIES. It has been found so.

Senator SMOOT. What is the date of the passage of the act?

Mr. CHALLIES. 1908, Senator Smoot.

Senator SMOOT. Can you tell me how much horsepower has been developed under the act?

Mr. CHALLIES. Since that?

Senator SMOOT. Yes.

Mr. CHALLIES. About 60,000 horsepower.

Senator SMOOT. In the three States?

Mr. CHALLIES. In the three Provinces.

Senator SMOOT. For the six years?

Mr. CHALLIES. Of course, that is the capacity to-day. The ultimate capacity of these three or four plants that are operating and which were commenced since the passing of these regulations is about twice that amount.

Senator ROBINSON. Has the capacity seemed to keep pace with the demand?

Mr. CHALLIES. Yes.

Senator THOMAS. What is the ultimate capacity of those various schemes or enterprises developed since 1908?

Mr. CHALLIES. I would say probably 100,000 horsepower.

Senator THOMAS. Then about six-tenths of it has been developed?

Mr. CHALLIES. Yes.

Senator CLARK. Have you ever had an estimate of the probable horsepower that could be developed in the Provinces you have spoken of and in British Columbia?

Mr. CHALLIES. Yes; but it is not worth repeating.

Senator CLARK. It is very great, is it not, particularly in British Columbia?

Mr. CHALLIES. Yes. It has been estimated that the total power capacity in Canada is about 26,000,000 horsepower. Later estimates reduced that to about 17,000,000 horsepower.

Senator SMOOT. That is for the whole of Canada?

Mr. CHALLIES. Yes, sir. British Columbia claims to have five or six million horsepower.

Senator NORRIS. Is British Columbia one of the Provinces of which you have been speaking?

Mr. CHALLIES. No. British Columbia came into the confederation in 1872 and controls her natural resources.

Senator NORRIS. She has control, herself, of her resources the same as the older Provinces?

Mr. CHALLIES. Yes.

Senator SMOOT. Do you know what the estimate is of the power that can be developed in the three Provinces controlled by the Dominion?

Mr. CHALLIES. The amount that is developed to-day?

Senator SMOOT. No; the amount of power that it is estimated can be developed in the three Provinces?

Mr. CHALLIES. Why, I could not give that offhand, Senator Smoot. I have been making a very elaborate investigation in the Province of Manitoba, on the Winnipeg River, which shows that over half a million 24-hour horsepower is possible of development on that river alone, and about 75,000 24-hour horsepower on the Bow River alone within 50 miles of the city of Calgary in Alberta. The other rivers of Alberta are not so favorable for power developments. The northern rivers of Manitoba and Saskatchewan and Alberta are so far away——

Senator SMOOT (interposing). From consumption?

Mr. CHALLIES. Yes; that we have never attempted to estimate their power possibility accurately.

Senator CHAMBERLAIN. You have those regulations and you can give them to us in their entirety?

Mr. CHALLIES. Yes; Senator Chamberlain.

Senator SMOOT. They were put in the record, I believe.

Senator CHAMBERLAIN. I would like to have them put in the record, Mr. Chairman.

Mr. CHALLIES. I have a memorandum here on the power policy and administration of the Province of British Columbia prepared for me by Mr. H. W. Grimsky of my office, that I would like to have placed in your record. That Province has a very elaborate and comprehensive law in force now, probably the most extensive water act in Canada.

The CHAIRMAN. Yes.

(The memorandum referred to will be found at the conclusion of Mr. Challies's statement.)

Senator CHAMBERLAIN. On the part of financiers, is objection urged against the restrictions of Government control? You said a while ago there had been no trouble about financing them, except in the past year or more. Was the difficulty caused by the difficulty of raising money or was it caused by objection to Government restrictions?

Mr. CHALLIES. Why, I never heard any serious objection to the Dominion Government's regulations from a financial standpoint. There are some features of our regulations though that I do not think are equitable or in the public interest. For instance, in our present regulations we provide that the rates must be formally approved by the railway commission of Canada before being put into effect, and that they must be resubmitted for approval every seven years thereafter. I think that is bad, because once a rate is approved it remains approved for seven years.

Senator NORRIS. You think it ought to be more elastic, so that it could be changed oftener?

Mr. CHALLIES. Yes. I think if there are improper rates there ought to be remedial measures exercised when necessary.

Senator NORRIS. What is your railroad commission? That is the Dominion railroad commission?

Mr. CHALLIES. Yes. It conforms, I understand, to your Interstate Commerce Commission.

Senator NORRIS. I see. These three Provinces—do they have commissions similar to our State railroad commissions and public utility commissions?

Mr. CHALLIES. The Province of Manitoba is the only western Province that has a public utility commission.

Senator NORRIS. And do the Dominion people permit the Manitoba commission to regulate rates in that Province?

Mr. CHALLIES. The Manitoba commission regulates rates under a provincial statute, over which the Dominion has no control.

Senator NORRIS. Is not that one of the Provinces in which you control?

Mr. CHALLIES. Yes. In that case I feel, personally, that the control of the rates by the Dominion railway commission is undesirable and a local control by a judicial authority were in the public interest.

Senator NORRIS. They do not have control in that Province, do they?

Mr. CHALLIES. They have it; but the board of Dominion railway commissioners is organized for a different purpose entirely. It is much like your Interstate Commerce Commission. They have worries of their own; they do not want to be bothered with this question of the control of power rates. Anyway, the control of rates could be better exercised by a provincial public utility commission.

Senator NORRIS. By a public utilities commission that was really on the ground, so to speak?

Mr. CHALLIES. Yes, sir.

The CHAIRMAN. Is there anything else to be asked Mr. Challies? We thank you, Mr. Challies; that is all.

(Following are the papers submitted by Mr. Challies for the record:)

REGULATIONS GOVERNING THE MODE OF GRANTING WATER-POWER RIGHTS IN MANITOBA, SASKATCHEWAN, ALBERTA, AND THE NORTHWEST TERRITORIES.

WATER-POWER REGULATIONS.

[Under the Dominion lands act and the Dominion forest reserves and parks act.]

Regulations made by His Excellency the Governor General in Council in virtue of the provisions of subsection 2 of section 35 of the Dominion lands act (7-8 Edward VII, Chap. 20), and by his Royal Highness the Governor General in Council in virtue of the provisions of subsection (b) of section 17 of the Dominion forest reserves and parks act (1-2 George V, ch. 10), to govern the mode of granting water-power rights in the Provinces of Manitoba, Saskatchewan, Alberta, and in the Northwest Territories, and in Dominion parks within the railway belt of British Columbia.

[Sec. 35, Dominion lands act, 7-8 Edward VII, ch. 20, as amended by sec. 6, ch. 27, of 4-5 George V, ch. 27.]

35. Lands which are necessary for the protection of any water supply or lands upon which there is any water power, or which border upon or being close to a water power, will be required or useful for the development and working of such water power, shall not be open to entry for homestead, for purchased homestead, or preemption, or be sold or conveyed in fee by the Crown, but may only be leased under regulations made by the governor in council.

2. Subject to rights which exist or may be created under the irrigation act, the governor in council may make regulations: (*a*) For the diversion, taking, or use of water for power purposes, and the granting of the rights to divert, take, and use water for such purposes, provided that it shall be a condition of the diversion or taking of water that it shall be returned to the channel through which it would have flowed if there had been no such diversion or taking in such manner as not to lessen the volume of water in the said channel; (*b*) for the construction on or through Dominion or other lands of sluices, races, dams, or other works necessary in connection with such diversion, taking, or use of water; (*c*) for the transmission, distribution, sale, and use of power and energy generated therefrom; (*d*) for the damming of and diversion of any stream, watercourse, lake, or other body of water for the purpose of storing water to augment or increase the flow of water for power purposes during dry season; (*e*) for fixing the fees, charges, rents, royalties, or dues to be paid for the use of water for power purposes, and the rates to be charged for power or energy derived therefrom.

3. Any person who under such regulations is authorized to divert, take, or use water for power purposes, or to construct works in connection with the diversion, taking, or use of water for such purposes, shall, for the purposes of his undertaking, have the powers conferred by the railway act upon railway companies, including those for the acquisition and taking of the requisite lands, so far as such powers are applicable to the undertaking and are not inconsistent with the provisions of this act or the regulations thereunder, or with the authority given to such persons under such regulations--the provisions of the said railway act giving such powers being taken for the purposes of this section to refer to the undertaking of such persons where in that act they refer to the railway of the railway company concerned.

4. Maps, plans, and books of reference showing lands other than Crown land necessary to be acquired by any such person for right of way or other purposes in connection with his undertaking shall be signed and certified correct by a duly qualified Dominion land surveyor.

5. Such maps, plans, and books of reference shall be prepared in duplicate, and one copy thereof shall be filed in the office of the minister at Ottawa, and the other shall be registered in the land-titles office for the registration district within which the lands affected are situated.

6. The minister, or such officer as he designates, shall in case of dispute be the sole and final judge as to the area of land which may be taken by any person without the consent of the owner for any purpose in connection with any water-power undertaking.

REGULATIONS GOVERNING THE GRANTING OF WATER-POWER RIGHTS IN THE PROVINCES OF MANITOBA, SASKATCHEWAN, AND ALBERTA, AND IN THE NORTHWEST TERRITORIES, INCLUDING ALL DOMINION FOREST RESERVES, AND PARKS, AND IN DOMINION PARKS WITHIN THE RAILWAY BELT OF BRITISH COLUMBIA.

Established and approved by orders of His Excellency the Governor General in council, dated June 8, 1909, April 20, 1910, January 24, 1911, August 12, 1911, and by order of His Royal Highness, the Governor General in council, dated August 2, 1913, in virtue of the provisions of subsection 2 of section 35 of the Dominion lands act. (7-8 Edward VII, ch. 20.)

NOTE.—These regulations were made to apply to all forest reserves and parks by order of His Excellency the Governor General in council, dated June 6, 1911, and by order of His Royal Highness the Governor General in council, dated August 2, 1913, in virtue of the provisions of subsection (*b*) of section 17 of the Dominion forest-reserves and parks act.

NOTE.—By virtue of the provisions of the railway belt water act (2 George V, ch 47) and the railway-belt water act, 1913 (3-4 George V, ch. 45), all water within the railway belt of British Columbia is administered under and in accordance with the provisions of the water act, 1909, and amendments thereto, by the Province of British Columbia, except only the territory included within Dominion parks.

Definition of works.—1. Under these regulations the word "works" shall be held to mean and include all sluices, races, dams, weirs, tunnels, pits, slides, flumes, machines fixed to the soil, buildings, and other structures for taking, diverting, and storing water for power purposes, or for developing water power and rendering the same available for use.

Mode of application.—2. Every applicant for a license to take and use water for power purposes shall file with the Minister of the Interior a statement in duplicate setting forth—

(*a*) The name, address, and occupation of the applicant.

(*b*) The financial standing of the applicant so far as it relates to his ability to carry out the proposed works.

(*c*) The character of the proposed works.

(*d*) The name or, if unnamed, a sufficient description of the river, lake, or other source from which water is proposed to be taken or diverted.

(*e*) The point of diversion.

(*f*) The height of the fall or rapid of such river, lake, or other source of water at high, medium, and low stages, with corresponding discharges of water per second, reckoned approximately in cubic feet.

(*g*) A reasonably accurate description and the area of the lands required in connection with the proposed works, such lands, if in surveyed territory, to be described by section, township, and range, or river or other lot, as the case may be, and a statement whether such lands are or are not Dominion lands.

(*h*) If such lands be not Dominion lands, then the applicant shall give the name of the registered owner in fee, and of any registered mortgagee or lessee thereon, and of any claimant in actual possession other than a registered owner, mortgagee or lessee.

(*i*) The minimum and maximum amount of water power which the applicant proposes to develop and the maximum amount of water which he desires for such purpose.

(*j*) Sketch plan showing approximate locations of the proposed works.

(*k*) Elevations of headwater and tail-water of the nearest existing works, if any, below and above the proposed works.

(*l*) Particulars as to any water to be taken, diverted, or stored to the detriment of the operation of the existing works, if any.

(*m*) Particulars as to any irrigation ditches or reservoirs or other works for irrigation within the meaning of the irrigation act, in use or in course of construction within the vicinity of the proposed works, and which might affect or be affected by the operation of the proposed works.

Application by a company.—3. If the applicant be an incorporated company, the statement shall, in addition to the foregoing information, set forth—

(*a*) The name of the company.

(*b*) The names of the directors and officers of the company and their places of residence.

(*c*) The head office of the company in Canada.

(*d*) The amount of subscribed and paid-up capital, and the proposed method of raising further funds, if required, for the construction and operation of the proposed works.

(*e*) Copy of such parts of the charter or memorandum of association as authorize the application and proposed works.

Application by a municipality.—4. If the applicant be a municipality, then, excluding the special information to be given by a company, the following information shall be given:

(*a*) The location, area, and boundaries of the municipality.

(*b*) The approximate number of its inhabitants.

(*c*) The present estimated value of the property owned by such municipality, and the value of the property subject to taxation by such municipality.

Minister may request further information.—5. The minister of the interior shall have the power to call for such other plans and descriptions, together with such measurements, specifications, levels, profiles, elevations, and other information as he may deem necessary, and the same shall be furnished by and at the expense of the applicant.

The agreement for (*a*) a license for the diversion and use of water; (*b*) a lease for the necessary lands.

6. Upon receipt and consideration of the application and information accompanying same, the minister of the interior may, if he approve of the proposed works, enter into an agreement with the applicant, which agreement, in addition to usual conditions and covenants, shall contain clauses to provide as follows:

(*a*) For a time within which the proposed works shall be begun.

(*b*) For a stated minimum amount of expenditure to be made in connection with the works annually during the term of the agreement.

(*c*) For a stated amount of water power to be developed from the water applied for within a fixed period, not exceeding five years.

(*d*) For summary cancellation of the agreement by the minister if any of the above conditions have not been complied with.

(*e*) For defining and allotting the areas of Dominion lands within which the applicant may construct and operate the proposed works; and if there are no Dominion lands available for such purpose, then for defining and allotting the lands in regard to which the applicant may exercise the powers given under section 35, subsection 3, of the Dominion lands act.

(*f*) For granting a license to the applicant, upon fulfillment of the said agreement, to take, divert, and use for power purposes a stated maximum amount of water, in accordance with the application, and plans and specifications as approved by the minister; the term of such license to be 21 years at a fixed fee payable annually, and such license to be renewable as provided for in these regulations.

(*g*) For granting a lease to the applicant of such Dominion lands as may be allotted under paragraph (e) of this section, and approved of by the minister, such lease to be at a fixed rental for a term of 21 years running concurrently with the said license, and renewable in like manner, and as near as may be subject to all the terms and conditions thereof. When there are no Dominion lands available for such purpose, or when other lands are considered by the minister to be more suitable for such purpose, then the minister shall define such lands in regard to which the applicant may exercise the powers given under section 35, subsection 3, of the Dominion lands act.

Inspection of construction works.—7. During the construction of any works for the development of water power the minister of the interior, or any engineer appointed by him for that purpose, shall have free access to all parts of such works for the purpose of inspecting same, and ascertaining if the construction thereof is in accordance with the plans and specifications approved of by the minister, and whether the terms of the agreement, as provided for in the preceding section, are being fulfilled.

The license for the diversion and use of water.—8. Upon fulfillment by the applicant of all conditions of the said agreement, the minister of the interior shall grant to the applicant a license as agreed upon; and such license shall contain clauses to provide as follows:

(*a*) The term of the license shall be 21 years, renewable for three further consecutive terms of 21 years each at a fixed fee payable annually and to be readjusted at the beginning of each term as hereunder provided.

(*b*) At the expiry of each term of 21 years the governor in council may, on the recommendation of the minister, order and direct that the license and any lease granted in connection therewith be canceled: *Provided*, That the minister shall have given at least one year's notice to the licensee of intention so to cancel

(c) If the licensee shall refuse to pay the license fee as readjusted by the governor in council or as fixed by arbitrators chosen as provided in paragraph (b) hereunder, then in such case the minister may renew the license at the former fee, or the governor in council may, on the recommendation of the minister, order and direct that the license and any lease issued in connection therewith be canceled.

(d) In either of the above cases compensation shall be paid to the licensee as provided for in paragraph (e) hereunder.

(e) On termination of the third renewal of such license, except in case of default on the part of the licensee in observance of any of the conditions thereof or of any lease granted in connection therewith, compensation shall be paid for the works to the amount fixed by arbitration, one arbitrator to be appointed by the governor in council, the second by the licensee, and the third by the two so appointed. If the licensee fails to appoint an arbitrator within 10 days after being notified by the minister to make such appointment, or if the two arbitrators appointed by the Governor General in council and the licensee fail to agree upon a third arbitrator within 10 days after their appointment, or within such further period as may be fixed by the minister in either such cases, such arbitrator or third arbitrator, as the case may be, shall be appointed by the judge of the exchequer court of Canada. In fixing the amount of compensation, only the value of the actual and tangible works and of any lands held in fee in connection therewith shall be considered, and not the value of the rights and privileges granted, or the revenues, profits, or dividends being or likely to be derived therefrom.

(f) The license shall state the maximum amount of water which the licensee may divert, store, and use for power purposes, and shall provide for the return to the stream or other source of water of the full amount so diverted.

(g) The licensee shall develop such power as, in the opinion of the minister, there shall be a public demand for, up to the full extent possible from the amount of water granted by the license.

(h) Upon a report being made by the minister of the interior to the governor in council that the licensee has not developed the amount of power for which there is a public demand, and which could be developed from the amount of water granted by the license, the governor in council may order to be developed and rendered available for public use the additional amount of power for which there is, in the opinion of the minister, a public demand, up to the full extent possible from the amount of water granted by the license, and within such period to be fixed by the minister, which period shall not be less than two years after the licensee or person in charge of the existing works shall have been notified of such order, and in default of compliance with such order the governor in council may direct that the license, together with any lease issued under these regulations, shall be canceled, and the works shall thereupon vest in and become the property of the Crown without any compensation to the licensee.

(i) Upon a report being made by the minister of the interior to the governor in council that a greater amount of water power could be developed advantageously to the public interests from the same stream or other source of water from which the existing works derive power, and (1) that the existing works could be enlarged or added to for such purpose, then the governor in council may authorize the minister to offer the licensee the privilege of constructing and operating such enlarged or additional works at or in the vicinity of the existing works, and to grant such supplementary license as he may consider proper for such purpose, and if the licensee fail within six months thereafter to accept such offer, and in good faith to begin and carry on to completion the enlarged or additional works, and to complete same in accordance with plans and specifications approved of by the minister, and within a fixed period, not to exceed five years, and upon like conditions as the existing works were begun and completed; or (2) if the minister shall report to the governor in council that the existing works, owing to their location or construction, can not advantageously be enlarged or added to in order to develop further power sufficient to meet the probable demand, or would be a hindrance to other works contemplated for such purpose; or (3) that the existing works can not, or will not, be any longer advantageously operated, owing to the exercise of rights existing or created under the irrigation act; then in every such case, the governor in council may order and direct that the license, and any lease in connection therewith, and all rights thereunder, shall be canceled, and the existing works shall thereupon vest in and become the property of the Crown: *provided always*, That in every such case compensation shall be paid to the

of section 8 of these regulations

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these regulations.

Small water powers of less capacity than 200 horsepower.—12. If upon receipt and consideration of the information set out in sections 2, 3, 4, and 5, the water power to be developed is found to have no greater capacity than 200 horsepower at the average low stage of water, the minister may issue a lease and a license, as may be required, authorizing the development of the proposed power, the lease and license to be for a period of 10 years, subject to such special terms and conditions as may be considered advisable in each particular case and renewable if, in the opinion of the minister, the power has been continuously and beneficially used.

BRITISH COLUMBIA.

[Section references, unless otherwise noted, are to the water act, 1914.]

In the Province of British Columbia the instrument granting a franchise to a water privilege is called a license. Licenses for power purposes where the power is to be bartered or sold are limited to a period not exceeding 50 years. (Sec. 10.) Such licenses are issued by the comptroller of water rights, an officer whose duties correspond to those of the State engineer in most of the Western States.

In the case of power licenses where the power is to be bartered or sold, and in certain other cases, the comptroller is not authorized to issue a license, nor is the applicant even permitted to proceed with surveys for detailed plans, until a certificate approving the general scheme of the undertaking is obtained from the minister. (Sec. 11, subsec. 4.) The certificate is the document which corresponds most nearly to the lease of other jurisdictions.

Before granting the certificate there is in every case a hearing before a board known as the "board of investigation." This hearing is advertised in advance, and an opportunity is given to the public to file objections to the proposed scheme. In this hearing any possible irregularities or weak points in the undertaking are bound to be brought to light. The board reports its recommendations to the minister, and the minister issues the certificate, after which the comptroller may proceed with the issuance of an authorization to make surveys and later, after detailed plans are approved by him, with the issuance of the water license.

CONTENTS OF CERTIFICATE.

The certificate, besides briefly describing the nature and general scheme of the undertaking which is approved, usually sets out the following matters and things:

(a) The amount of the capital of the company which shall be subscribed and the amount which shall be actually paid up before the company shall begin the construction of the works; or

(b) If the work has been divided into parts, then the amount of capital which shall be subscribed and the amount which shall be actually paid up in respect of each part before beginning the works on each particular part.

(c) The time within which the works shall be begun, and if divided, then the time within which each part shall be begun.

(d) The territory within which the company may exercise its powers.

(e) The amount of the bond (if any) which will be required as security for the payment by the applicant of all costs in connection with the investigation by the department of his application.

(f) A direction to the comptroller to limit the license when issued to a definite period (not exceeding in any case 50 years), together with a direction to incorporate such provisions respecting renewal of the license at the end of the term subject to laws and regulations then existing as the minister may deem necessary to meet the needs of any special case.

CONTENTS OF LICENSE.

There are two water licenses issued to every applicant who carries his application to finality. One of these, the conditional water license, besides giving the applicant the authority to construct works and an interim right to use water as soon as the works are sufficiently advanced for the purpose, makes all water rights held by the applicant conditional upon his commencement and completion of the works within certain stated times. Every such license has a specific reference to certain detailed plans and specifications, previously ap-

proved by the comptroller and then on file in his office, and the construction of the works must be in accordance with these plans and specifications or approved departures therefrom. When the above terms respecting construction of works are fully complied with and the water has been put to a beneficial use, the said conditional water license is recalled and a final license is issued to replace the same. Terms common to both the conditional and the final license deal with the following matters:

(*a*) The source of the water supply.

(*b*) The point of diversion from the stream.

(*c*) The date from which the right to divert water takes its relative precedence.

(*d*) The purpose of the use.

(*e*) The maximum quantity of water which may be diverted from the stream and used at the place of use, respectively.

(*f*) The period of the year when the water may be diverted.

(*g*) The area and description of the lands upon which the power is to be generated, and also the extent of the territory within which the power is to be sold, bartered, or exchanged.

(*h*) Description of the works to be constructed or already constructed, as the case may be. This item usually refers to an exhibit accompanying the license which is prepared by an engineer in the water rights branch, and the exhibit in turn refers specifically to plans and specifications on file.

(*i*) If any change is proposed in the said works which would be a material deviation from the plans as approved or the works as accepted, plans of such proposed change must be filed with the comptroller and approved by him.

(*j*) The license is made appurtenant to the particular undertaking in respect of which it is issued.

(*k*) The terms and conditions of the certificate of the approval of the undertaking are incorporated with and made a part of the license.

(*l*) The license is subject to all the provisions of the water act.

TRANSFERS.

Transfer of such licenses and undertakings from one company to another are closely watched in British Columbia. The following provision of the act bears on this point (sec. 14, subsec. 1):

"No 'class C' license and no undertaking connected therewith shall be assigned or transferred except under the authority of an order made by the lieutenant governor in council after hearing a petition for that purpose, and upon its being made to appear that such assignment or transfer is necessary or expedient in the public interest, and upon the giving or the renewal of such bond as may be required."

If any such water privilege is sought to be transferred to and used in respect of an undertaking essentially different from that to which the license is made appurtenant, all the procedure of the act with reference to posting notices, advertising, etc., required of new applicants must be again followed. (Sec. 14, subsec. 3.)

OBLIGATIONS COMMON TO ALL APPLICANTS AND LICENSEES.

The obligations and restrictions common to all applicants and licensees are in the act and in the accompanying regulations rather than in any agreement entered into specially by the licensee. Among these obligations and restrictions the following may be worthy of special attention.

FINANCIAL REQUIREMENTS.

Every applicant in the class under consideration must be either a municipality or an incorporated company or a body corporate, and in either case duly empowered to exercise the required functions (sec. 11, subsec. 4). This insures publicity of financial transactions and better opportunity for regulation.

Before any license or even authority to proceed with surveys is issued to any such applicant, the applicant must file a statement showing that he is financially able to carry out the undertaking, and that in any case the authorized capital of the company exceeds by 50 per cent the estimated cost of the proposed works, and that 25 per cent thereof is subscribed and 10 per cent thereof is actually paid in cash (sec. 11, subsec. 5, and sec. 75, subsec. 1, item (*m*)).

RENTALS AND BONDS.

To compel applicants to proceed with surveys and works under their applications a stiff annual rental fee is charged, beginning with the date when an authorization to make surveys is issued. The amount of this annual rental fee is the same as that of the application or record fee. The following excerpt taken from an article in the annual report of the water rights branch for 1913, at page 79, will give an idea of how these fees run in British Columbia, both under the present regulations and those superseded by them:

"A company operating on the Kootenay River, whose record fee under the existing fee bill would be $5.140, would, under the proposed tariff, pay $3,397; the head in this case is 66 feet and the flow of water 4,500 cubic feet per second. The same company has another development on the same stream where the head is only 34 feet, and in this instance it would have paid $2,000 under the existing fee bill and $1,202 under the proposed tariff. On the other hand, a company operating on Powell River, where the head is 147 feet and the flow of water 2,427 cubic feet per second, would have had its record fee increased from $3,027 to $3,852 by the proposed regulations. In still another case on the Campbell River, where the head is unusually high (347 feet), the fee would have been raised from $3,000 to something over $8,000. In a pending application for a water-power privilege on the Fraser River, where the volume applied for is very large but the head comparatively low, the fee would be reduced from approximately $50,000 under the old tariff to approximately $17,000 under the new; but in another pending application, where the head is 7,000 feet and the flow of water applied for 1,500 cubic feet per second, and where 125,000 net horsepower may be developed, the record fee would be raised from $2,100 to approximately something over $13,000."

These annual fees paid during survey construction period are afterwards credited to the company as an advance payment of fees falling due in the operation period if the applicant proceeds to the completion of his works (rule 61 of regulations, at page 88 of same report).

In adition to the above application and annual fees, a bond, the amount of which shall be at least five times that of the application or annual fee referred to above, is required of every such applicant to insure the carrying out of surveys and the construction of works (rule 58, same).

EXTENSIONS OF TIME.

The following provision of the act is self-explanatory as respecting the securing of extensions of time for the completion of works:

"Before the time fixed for the completion of the works and of the putting of the water to the beneficial use specified as aforesaid, an application in writing may be made to the comptroller to extend the time; but the comptroller shall not entertain such application nor have any power to extend the time unless the applicant shall satisfy the comptroller by statutory declaration that the applicant has begun and diligently continued the work in good faith, and has been prevented by causes beyond his control from completing the works and beneficially using the water as aforesaid."

SUPERVISION OF TOLLS AND CHARGES.

The following excerpt from the act will illustrate the extent to which the rates and charges of all power companies are subject to supervision in British Columbia (sec. 159):

"(1) Every such licensee, before charging or collecting any tolls, shall submit any schedule fixing or determining the same to the board for approval, and shall file a copy thereof in the office of the comptroller and of the water recorder of every district affected.

"(2) When the schedule has been submitted the board shall set the time and place for a hearing, and shall require the company to publish, once a week for four weeks in a local newspaper and for two weeks in the Gazette, a notice that a copy of the schedule has been filed in the office of the comptroller and in the office of the water recorder of the districts affected (naming them) that the application for the approval of the schedule will be heard at the time and place fixed by the board, and that any person who might be affected by the schedule may file an objection or appear in person and be heard at the said hearing.

"(3) Any person who has filed a written objection as aforesaid shall be notified by the board of the time and place of the hearing and of any adjournment.

"(4) The board at or after the said hearing may approve or disapprove of the schedule, in whole or in part, and may adjust, increase, or decrease the tolls fixed in such schedule or amend the terms thereof, and shall determine the period of time, not exceeding 10 years, during which such schedule shall remain in force, as may be deemed expedient in the public interest.

"(5) Any company whose schedule has been approved under the 'water-privileges act, 1892,' or the 'water-clauses consolidation act, 1897,' shall resubmit its schedule to the board before the 1st day of January, 1915; and any company whose schedule has been approved under the 'water act, 1909,' or the 'water act,' being chapter 239 of the 'Revised Statutes of British Columbia, 1911,' shall resubmit to the board its schedule within five years from its approval; and the board shall thereupon proceed as provided by subsections (2), (3), and (4) of this section.

"(6) Every schedule approved shall be published in two issues of the Gazette and in four weekly issues of a local newspaper, and in any action brought against any person in respect of nonpayment of any tolls thereunder such person may plead as an answer to such action that the publication has not been made as aforesaid."

CONCLUDING STATEMENT.

From the above outline it is noted that British Columbia's policy is, as far as possible, to have the officers of the department carefully investigate each application and then issue licenses, certificates, or other instruments setting out the precise limits of each company's special rights and obligations. This requires, perhaps, closer scrutiny of each case than where stipulations or leases are used. The act and regulations are relied upon to take care of those rights and obligations common to all licensees.

J. B. CHARLES

(Thereupon, at 12.10 o'clock p. m., the committee took a recess to 2 o'clock p. m.)

AFTER RECESS.

The committee met at 2 o'clock p. m.

The CHAIRMAN. Mr. Finney, I understand you desire to be heard now. You may proceed.

STATEMENT OF MR. JOHN H. FINNEY, OF WASHINGTON, D. C.

Mr. FINNEY. Mr. Chairman, I am a director of the American Institute of Electrical Engineers, a member of its public-policy committee and its water-power committee, and have been a student of the water-power question and a writer on engineering topics for a great many years. In fact, practically my whole life has been spent in the electrical industry. In business I am manager of the Washington office of the Aluminum Co. of America.

Mr. Lincoln yesterday appeared before this committee, representing the institute as president. I appear as a member of its public-policy committee. The American Institute of Electrical Engineers is the great national body, comprising in its membership the men who have created the electrical industry and the men who are still creating it, because many problems that electrical transmission has brought into being are still problems to be solved by engineering skill and ingenuity.

A census of the water powers of the United States taken about 1880 showed that there were in the United States at that time about 7,500,000 horsepower, including Niagara Falls, the 7,500,000

horsepower representing power that could be developed by water wheels and used locally. If we have 30,000,000 to-day, or 60,000,000 or 200,000,000, as has been stated, it is because the art of electrical engineering has made water powers valuable, which, under any other system of utilization, could not at any time be considered as power, because falling water is not power; it is only when it is harnessed and, in a majority of the cases we are considering, it is only when it is harnessed to electric generators that it can be made to perform any useful work.

Niagara Falls has been in existence for untold centuries, and it was only when Niagara Falls power was electrically developed that it really became a factor in the economic life of the Nation; and that, of course, is true of water powers anywhere in the United States.

Falling water is potential power. To develop it into actual power requires three essential things. There is first required the opportunity existing in falling water as a site for its development; secondly, the gathering together of enormous amounts of capital which may be attracted to the business as an investment; and, as it has been said in the brief submitted yesterday, capital can not be legislated into investment; it can not be compelled to invest by legislation.

Third, the business requires a profitable market for its output, because electric power is peculiar in this respect. The act of generation of electric power is also the act of sale. You have no storage of it under ordinary conditions. The connected load at any one time in service is the measure of your sale at that particular time, no matter what your capacity is.

The valley load, Senator Norris, for instance, which has been talked of here, and the peak load, simply represents at that particular time the existing load factors. You do not store it up. So, when you talk about the valley load as compared with the peak load you find that you have the valley load at most periods of the day as a source of revenue, but the peak load determines the installation required by the enterprise.

The nondevelopment of this tremendous amount of power, whether it is 30,000,000, 60,000,000, or 200,000,000 horsepower, is a tremendous economic waste and industrial loss to the Nation as well as to the communities which this power could serve, and the latter is a point which is very frequently overlooked, for, after all, while the Nation is concerned in the upbuilding of a given community or a section or a State, it is the States themselves that are more vitally concerned and will more directly benefit from the power. If we realize that in 1905, which is the last year for which I have figures available, horsepower or energy costing the consumer perhaps $20 a year, produced $1,152 worth of finished product, and that the manufacturing output that year was valued at $17,000,000,000, or about seven times the total receipts of the railroads that year, we can glimpse, at least, the tremendous loss that we are undergoing each year that we let this power go to waste.

When we are talking about saving to the consumer and plan to look after the consumers' interests it is well to bear in mind that the consumer is probably buying, in the form of electric power, the cheapest form of energy that the world has ever known, whether he pays 10 cents per kilowatt for it for general lighting or whether he

pays, as larger buyers do, 2 cents or 3 cents per kilowatt for general power purposes. At that price it can be said without any contradiction that it is the cheapest form of power that the world has ever seen, and the most convenient.

No one successfully disputes the present blocking of progress due to inadequate laws, nor can the wisdom and desirability of a policy which will open for development the many millions of horsepower capable of commercial development in the United States be doubted. This development, in the minds of most people—laymen, who have not studied the question, and quite naturally—has in view only that use of hydroelectric power as a public utility. This bill clearly shows that view.

It is interesting to note, so far as I am able to size it up, that by far the largest percentage of power in the United States will be developed along some other line than strict public use. I mean by that its public use, which we see here in Washington, for instance, in the form of lighting, street railway service, small motors, fans, etc. I designate this much larger development as a semipublic use, in which the product resulting from its use will not be light and power, but will be:

First. New agricultural products through irrigation, and it is well at this point to note that irrigation will finally depend upon hydroelectric development. The sphere of the gravity system has about come to an end, and the great development that is going to come through the irrigation of the arid lands in the West is bound to come through some convenient and cheap power that will pump water to the high levels. So that the use of power for irrigation will, of course, result in increased agricultural production and upbuilding of agricultural communities.

Second. There will be an increase of transportation facilities, due to the electrification of steam roads. That is absolutely impending. We see it in the electrification of the terminals of various systems, in the electrification of difficult grades out in the mountain regions in the West, and the big construction that the Chicago, Milwaukee & St. Paul Railroad has under way. And to my mind the electrification of steam roads represents the very best opportunity to-day for the electrical industry. It is going to result in a very large increase in transportation facilities, and it should result in decreased costs of transportation.

Senator NORRIS. If you will, Mr. Finney, right at that point, please tell us what the Chicago, Milwaukee & St. Paul road has to pay for its energy, if you can?

Mr. FINNEY. Senator, I do not know that; but it is a very low rate.

Senator NORRIS. It would necessarily have to be.

Mr. FINNEY. It would necessarily have to be.

Senator NORRIS. They do not generate it themselves, do they?

Mr. FINNEY. No; they buy it; but, of course, it is the ultimate intention to develop it themselves through water power, the initial installation being 100 miles, and I understand contracts have been made covering this mileage, and an additional 300 miles will come in time.

The third item is manufactured products in the form of electrically manufactured chemicals, or metals, or fertilizers, and similar prod-

ucts through processes many of which are yet undiscovered, but possibly only through electrical methods.

As to strict public use, we are using in our public utilities throughout the country perhaps not over 3,000,000 horsepower of the 6,000,000 hydroelectrically developed water power. The balance is even now used in the manufacture of these things I have just mentioned in relatively large units, both for electrochemical and electrometallurgical products. If we further increase the strict public utility use, by which I mean the use that we see here in Washington, to perhaps 10,000,000 horsepower, I believe that we will take care of for the next 50 years the entire needs of the public-utility users. I say that because it is increasingly difficult to supply them with hydroelectric power in the face of the frequently cheaper cost and manifestly more reliable steam-generated power. We have to make a very decided bargain price in order to get them to use hydroelectrical power at all, due to many reasons, one of which, and the most important of which, is the inherent risks as regards continuity of the service. When you consider that this power is conducted 100 miles or 150 miles or 200 miles over copper wires or aluminum wires, on frail structures, towers, or poles, the chances for failure are many and frequent, and that is not the case with a well-designed, modern steam plant located right at load centers, where continuity of service can be expected for 365 days in the year.

Senator NORRIS. In the case of an electric railroad, they do not expect to use wires to transmit the power to where they actually use it, do they?

Mr. FINNEY. Yes, sir; they must use wires.

Senator NORRIS. I have reference to the practical application of the energy to the engine. Will it not be similar, for instance, to the terminal engines used by the Pennsylvania Railroad in New York City?

Mr. FINNEY. I do not think, Senator, that it has been determined, whether it will be a third-rail installation or overhead trolley. I imagine it is overhead trolley—I think so—I do not say that has been finally determined, however. I think they are going to use alternating current at very high voltage, perhaps, 11,000 volts, which would be very difficult to install on a third-rail system, and somewhat dangerous.

An additional use of 10,000,000 horsepower, therefore, as I see it, would take care of the so-called public utility use for the next 50 years.

So that this will leave, of the 30,000,000 or 35,000,000 or 60,000,000, or whatever figure you choose to fix as the available horsepower in the United States and as I think it is nearer 35,000,000 than it is any other figure, there is some 25,000,000 awaiting a use from the three principal sources above designated as semipublic use.

Water powers in those cases bear exactly the same relation in the manufacture of those products as the boiler does to the manufacturer using coal, and is only a part of the initial investment for plant equipment.

Now, irrigation would require the use of hydroelectric power for but three or four months in the year. A hydroelectric plant developed solely for irrigation has eight or nine months of the year in which, if it is not doing any other useful work, it is wholly

lost. Is there any economy, from an engineering point of view, in building a plant that is used for three or four months out of the year, when that same plant could be doing useful work twelve months out of the year in some other service?

Senator CLARK. And yet, notwithstanding that, might not the conditions be such that it would be a good commercial proposition, even though it worked only the three or four months in the year?

Mr. FINNEY. Well, I would not say that it might not be under some extraordinary conditions.

Senator CLARK. I am asking that question because in very many of these suppositious irrigation projects the power could be used for no other purpose, because they are isolated, and the time and practically the only purpose that could be accomplished would be pumping water for irrigation.

Senator SMOOT. The only way it would be profitable for irrigation, in my opinion, would be where there was a very low day load, and you could use the power for the pumping of water in the daytime, when there is a very small load on the plant. I know that is the case in a number of parts of my own State, where the power is sold for irrigation about four or five months in the year, but used only in the daytime.

Mr. FINNEY. Senator, what I have in mind is that it is wrong, economically, to put in a plant that is available for use only four months out of the year.

Senator SMOOT. Oh, sure.

Mr. FINNEY. Just follow that for a moment. A man can come down here and get a permit in perpetuity for a water power which shall be used four months out of the year, but if he attempts to make any other use of it for the other eight months, if he sells a miscellaneous lighting load, or power for any other use, he has got to come under the form of a revocable permit under the present law, and certainly that is wrong in theory from the standpoint of sound engineering and economics.

To get back to this manufacturing field, I do not believe any of us realize how much business is being done and is going to be done in the manufacture of these various articles by electric power. And in this case the industries of the United States enter into direct and fierce competition with water powers anywhere in the world, because ocean rates are no barrier to products that will run in value to 20 or 25 cents a pound. As a matter of fact, nitrate of lime, or nitric acid fixation plants in Norway, located, as they are, on the shores of deep water, operating under the very high heads, can develop electric power cheaper than is our capital cost necessary to develop water powers in the United States. Their capital cost is so low and the available heads are so high that they can produce power for as as $4 or $5, in some cases, per year for 24-hour power. Our capital account is double that in the average hydroelectric plant in the United States, with nothing added for operation and depreciation. These industries can not be established by steam power. They can be established only because of water power, and cheap water power at that.

Such enterprises require not only large capital but they require permanency of tenure and stability of investment. These capital must have, if it is to be attracted to it.

A modern hydroelectric system is a system of service, and service in perpetuity. Let me make that plain. I am not an advocate of rights in perpetuity, but service in perpetuity, at the hands of some operating agency, whether that agency be National or State or private enterprise or corporation enterprise, is inevitable so long as electric power is demanded and so long as it serves a useful purpose, and this use in perpetuity is inevitable. Let me briefly point out what a modern hydroelectric system comprises as a public utility, and it can best be shown by citing such a great system almost at our doors, a system serving, with a network of transmission lines covering two States, serving some 35 towns with light, railway service, motors, etc., serving nearly 200 cotton mills, interurban and urban railways, and embracing four great water-power stations, supplemented by four great steam stations. This is the Southern Power Co., with headquarters at Charlotte, N. C. This company is about 10 years old. It started about 10 years ago to develop a small 10,000 horsepower plant at Catawba, N. C., to transmit power to Charlotte, N. C. It soon got a 10,000 horsepower load, and then it began to wonder what was going to happen to it. It acquired other water rights; it developed, at Rocky Creek, an additional 32,000 horsepower, and soon grew to capacity at that station; and it then, 2 miles lower down on the river, developed another 32,000 horsepower; and they soon grew beyond that capacity, and they then developed, at Ninety-nine Islands 24,000 horsepower; and then it got into a period of low water on the various rivers, and began to put in steam plants, and built a 10,000-horsepower steam plant at Greenville, S. C., at this end [indicating on map] of the line.

They have since built three other steam plants, located at various points, because of low-water conditions that made them absolutely imperative. With a connected load of about 100,000 horsepower, they had to put in steam in order to reliably supply the entire system. It is furnishing power for a projected 500-mile interurban railroad throughout the Piedmont region, which will extend in time from Atlanta to Durham, some portion of which, perhaps 100 miles or more, has already been built. It is furnishing power to public utilities, as I said, in 35 or 36 towns. And it has not stopped growing. I will venture to say that 10 years from now the Southern Power Co., from some source or other, water power or steam-generated power, will have doubled its present output, and 50 years from now it will probably be five times as big as it is to-day.

This development is all on private lands, they having gone out and bought this property and put in large amounts of money, more than $20,000,000. Now, what policy is conceivable that at a predetermined time, whether that period be 50 years or longer or shorter, this enterprise will be wiped out of existence. It is true that the agency of operation may change, but at the hands of some operating agency, whether it is National or State or the present owners or their successors, the community served by this hydroelectric power, combined with steam power from these lines, will be served in substantially the same way that it is being to-day, and will require and obtain it for all time. It is of course obvious, as we see here, that a public utility service can in part perform all the functions I have designated under the manufacturing head or semipublic-use head, if it is permitted to

do so, but in the main, and certainly as to the last group of electrochemical and electrometallurgical industries, laws must be framed for such enterprises as will be based on a proper conception and not on the present misconception of the problems, or the enterprises will not be built in the United States, because these enterprises come into being solely from the standpoint of the cost of electrical power, and if the cost is $8 per annum here as against half that figure abroad it is absolutely sure that they will go abroad. And they are going abroad. Manufacturers that have planned to establish industries in the United States have gone to Canada, and there is being built today in Canada a plant that will ultimately develop a million horsepower, to be used in just such an enterprise.

Senator CLARK. That is the one they sought to construct in one of our Southern States?

Mr. FINNEY. Probably. Yes, sir.

Senator CLARK. Now, that was mentioned here the other day. Just what was the difficulty that lay in their way here? Can you tell us?

Mr. FINNEY. The power company which proposed to furnish the power could not get the governmental right to develop the power. It was on a navigable stream, and there was no bill that would pass.

Senator SMOOT. The bill was vetoed by President Taft?

Mr. FINNEY. It was vetoed by the President.

Senator CLARK. If the bill had become a law, would that have enabled the development to have gone forward?

Mr. FINNEY. I think so. I think they were willing to go in under the general dam act as it existed at that time, but the present dam act and certainly not the bill you are considering does not, in my opinion, reach the real situation that these enterprises create. We disregard the fact that these big enterprises must have permanency of tenure of at least a sufficiently long time to justify an enormous expenditure of money, which money is in jeopardy if the water plant is confiscated or taken over by the United States or even released to another lessee. These enterprises build a manufacturing town, issues bonds on the town, or the town issues bonds. The town builds schoolhouses and paves the streets, etc., and the entire existence of the town is dependent upon the location of that enterprise at that one point, and if in 50 years it has got to stop because the power is taken away, they do not build them. A little later in my talk I will perhaps suggest a remedy for that condition.

I wonder, in listening to the various gentlemen who have appeared before you and to the questions asked, if I might make a brief statement of the factors entering into the cost of plants, one to develop power from a hydroelectric system, to be transmitted to a market, and the other to develop a steam plant located at the market, which statement is interesting as showing the radical and always present differences that exist in a determination as to which shall be built.

A hydroelectric generating system is composed of the following principal items: We must have water-power rights, governmental or State, leased or purchased—and they are usually purchased, because I apprehend that while this is called a leasing bill, if there is any tax proposed it will be on a basis under which we will wish we could buy the land. Next comes the land for a dam site. If it is not leased, it must be purchased. We next need land for the

storage sites, because most of these water-power plants must have storage, and particularly in the West, where the streams are small. We must have storage in order to even up the streams, and those must be purchased, including overflow rights.

Next we must have land for the generating station, for the high-tension switching station, and transformer station. We must have land for substations at each distributing point. We must have land for rights of way for transmission lines, and frequently only obtainable by purchase. We must have large expenditures for dams, headworks, flumes, ditches, etc. We must buy electric generators, wheels, gate mechanisms, high-tension transformers, high-tension switching apparatus, switchboards, etc. We must have extensive and expensive transmission lines.

I do not believe many men appreciate the very large amount of money that goes into transmission lines. A modern hydroelectric system just being built and going into service perhaps in the next 30 days, transmits 60,000 horsepower from the point of generation to another point 55 miles away. The rights of way, the towers, and the conductors of that enterprise cost $20,000 per mile, or more than $1,100,000 just for transmission lines alone; and it frequently runs from $10,000 to $15,000 in a modern system, particularly when it is of very high tension.

We must have substation structures and equipment at all these places—not only the land at points of distribution, but substation structures and equipment and transformers and switching apparatus, because while we raise the voltage at the point of generation we have to lower it when we get to the point of distribution.

Senator CLARK. Is not that common to a steam plant also?

Mr. FINNEY. No, sir: as I will explain.

We must have large engineering cost and construction interest charges. I do not believe many people appreciate the large amount of money that is spent in interest charges during the construction period, which runs over one, two, three, and sometimes five years to the time of starting operations. Money must have its interest. It works 24 hours a day. We may have a large investment in auxiliary steam plants, because frequently we can not take care of the peak loads except by auxiliary steam. We must have practically a complete development of that water power. That point was touched upon by Mr. Cooper this morning, who shows that with only a part of his generating equipment installed at Keokuk he had to build his dam just as long and just as high for the amount of power he is now developing as he would for complete development. So that is always present in a water-power plant. You have to build at least the major portion of the structures to the complete capacity of the plant.

We have next the heavy cost of temporary structures, the engineering works, such as railways, for the transportation of material for these projects which are usually not alongside of a railroad track. They frequently have to build miles of steam railroad to get into them. We must have expensive structures for cofferdams, temporary power plants, concrete plants, derricks, etc., material that is usually of small value on the completion of the plant.

Let us contrast with that what is required in the matter of a steam plant. We have to buy lands, of course, that are adjacent to the

market. For instance, here in Washington, it is out here in Benning, and is not expensive land, located right on the edge of a stream, so that condensing water can be had free, and that is usually the case in most towns. You can get a little way out of town, sometimes right in the heart of the town, and get inexpensive property.

I may say in this connection that in spite of the high-priced land in New York City the biggest steam-generating unit in New York City turned down, some two or three or four years ago, a water plant of 36,000 horsepower within 80 miles of New York, because they could generate power, with coal costing over $3, cheaper than they could deliver electric power from the water-power plant. I have that on the authority of their engineer.

Senator CLARK. Did they have their steam plant already constructed?

Mr. FINNEY. They had a large portion of it; yes.

Senator CLARK. And they of course considered the initial expense?

Mr. FINNEY. Well, that is probably true, because I think that has to be considered. But, as a matter of fact, they figured that they could generate power cheaper from coal than they could deliver power from a water power 80 miles away; and they said, while their present station is making power at 4 mills per kilowatt hour, improvements which they had in contemplation would bring it down to about 3 mills per kilowatt hour.

Senator CLARK. Of course, it would probably not be good business for them to discard a plant which they already have.

Mr. FINNEY. It was not a discarding; it was a supplemental load. They had to have more power, and yet they would rather put in additional steam power than to take the hydroelectric power.

And there is a little plant being built in West Virginia to-day, with which I a very familiar, that is going to put power generated from coal onto the busbars and transmit it to the coal mines throughout the district, and they say their cost will be under 3 mills per kilowatt hour. That is a 20,000-horsepower plant. It is a small plant. They are building that plant, including transmission lines, for a capital cost of less than $55 per kilowatt.

Senator SMOOT. There is a small plant being established in your own State, Senator Clark, creating power by oil rather than by water power.

Senator CLARK. Where is that?

Senator SMOOT. I forgot the name of the place. I will give it to you. Mr. Nunn is putting it in.

Mr. FINNEY. I will ask you to contrast the list of things that the man who has water power has to do, with the simple list of the man having a steam plant.

He buys land in or adjacent to the center of distribution, usually moderately priced and small in amount. A 10,000 kilowatt plant can be installed with a building 150 by 200 feet, so that his building cost is not excessive. He has to build his structure for generating stations very much smaller and much less expensive than the same structure for the water plant. He has to buy turbines or engines; usually turbines. He has to buy generators, boilers, pumping appliances, switchboards, etc., all of which are very much less than the same unts in water power. And he has a moderate engineering cost, low interest

charges during a very brief construction period, without very much risk of construction damage. In other words, he can build a 10,000-kilowatt plant in six months and get it going. He has no transmission lines, or a limited amount of transmission lines in his case, because he is at the center of distribution.

And while I am on that I would like to say just one word. I have noticed here in the hearing much said with respect to the prohibition of the sale of energy to a distributing company; I believe there is a misapprehension as to what a distributing company is. A distributing company is a company like the Potomac Electric Light & Power Co. in this city. It is occupying the streets with mains, wires, service connections, and it distributes power from its Benning station to miscellaneous people and enterprises in the city of Washington. If an electric plant were built at Great Falls and transmission lines built from Great Falls to the city of Washington, I would not call that transmission line a distributing line. It is a transmission line, because we must either sell to the Potomac Electric Light & Power Co. for distribution through its mains and distributing system or we must build a distributing system of our own, and, of course, the modern theory is that we can not come into Washington and compete with the Potomac Electric Power Co. At least we can not do it in a great many cities and should not in any. The commission form of regulation holds that that sort of competition is not fair, and upholds the existing company in its contention that it should not be subject to ruinous competition.

So that the distributing system which is prohibited in the bill is actually the principal source of business for a hydroelectric company.

You prohibit the sale of more than 50 per cent to any one concern, and thereby you have taken away the market for the big user, and the bill then proceeds to take away one other user in the prohibition against the sale to a distributing company; and I do not know where the hydroelectric power company is going to get any business under the two sections containing these provisions.

It is, of course, the institute committee's opinion, and in which I heartily join, that the Ferris bill is totally inadequate and is based upon a complete misconception and misapprehension of the situation.

Senator NORRIS. When you refer to "the committee" you refer to the committee of engineers and not to this committee?

Mr. FINNEY. Yes; I am referring to the water-power committee of the institute. I do not know about this committee.

I do not believe that the Ferris bill intelligently solves the question at all. I do not believe it is going to permit the development of a single important hydroelectric system in the United States. I do not believe there is a man sitting at this table who would invest a single dollar in a hydroelectric system installed under the provisions of that bill.

Senator NORRIS. Now, if we eliminate those two objections, assuming that they are objections, as you have stated—and they could be very easily omitted—what would you say of the bill?

Mr. FINNEY. I should say that it would be very much improved, Senator.

Senator NORRIS. Would it then be such a bill as you would approve of?

Mr. FINNEY. Senator, may I just complete my statement and then I will take that up, because I have something to say which bears on that?

Senator NORRIS. Certainly.

Mr. FINNEY. Now, it is often held that the solution is difficult. It does not seem to me, if the problem is rightly considered, as a service in perpetuity—not to an individual or to a corporation in perpetuity—and I want that distinctly noted. I am in strict accord with progressive thought with respect to that. I do not advocate it any more than the most radical conservationist. And I believe I am a conservationist of a pretty good kind, at least. We spend a good deal of money on river improvement, and sometimes we get navigation and sometimes we do not. But we do spend a good deal of money in river improvement for the benefit of navigation. Is there any proposal that the ships that will finally use the streams, when they do use them, coming to the Government to be re-leased to some other lessee or otherwise disposed of at the end of 50 years under a general plan, such as is proposed by this bill governing water power? Is the proposition to establish a merchant marine based on the purchase of ships to establish it? And if it is based on the purchase of ships, how are you going to buy them? Are you going to buy them at actual cost or at the fair value? If the telephone and telegraph lines are to be finally taken over—or the railroads, as is seriously proposed, perhaps—how? At their cost or at their fair value? Why single out water power, which is as important as any of the others, and, in many cases, even more important than all the others, for a different treatment? These manifestly unjust restrictions on the development of power and equally unjust treatment of the property at the end of a given period, whether that be 50 years or more or less, can be cured, it seems to me, if we provide in a simple way and in a few words that the property is subject to recapture by the Government at the end of an agreed period at its fair value as a going concern; or, failing to recapture it by purchase in that way, it may be re-leased to the original lessee on conditions to be fixed by the then existing laws.

Senator STERLING. What would you say as to the period provided for in the bill, under those conditions?

Mr. FINNEY. As to the 50 years?

Senator STERLING. Yes.

Mr. FINNEY. I think 50 years is as fair a term as any other, because under this plan it is an indeterminate term. It permits the continuity of service at the hands of the original lessee until the Government sees fit to acquire it. It would require that the property be purchased, and to be purchased at a fair price.

Senator NORRIS. Would it be objectionable, assuming that were put in in those exact words, that the Government, if it takes it over, shall pay the fair value, to make the term shorter than 50 years?

Mr. FINNEY. I think, Senator, you would find that 50 years is not too long, and in a great many cases it is too short a time to develop a given water power.

Senator NORRIS. That might be; but there would be no risk, would there, with those provisions properly placed in the bill, to anyone who invested his money?

Mr. FINNEY. No; but I think whatever the term is, whether it is 50 years or, as in Canada's case, 84, or any other period——

Senator NORRIS. No; in Canada it is 21 years.

Mr. FINNEY. But it is subject to renewal.

Senator NORRIS. But the Government has a right to take it over.

Mr. FINNEY. If the Government wants to, it can take it. I do not see any objection to that. You can not avoid that feature.

Senator NORRIS. You can put that in the bill, and I assume that everybody would want the Government to act in good faith, and if we said we would not take it over before the expiration of 21 years, we ought not to do it.

Mr. FINNEY. I think some difficulties in the way of long-term bonds would be encountered, and particularly if you consider that it is not a 50-year period you are granting. The permit starts at a given date. The plant starts when you finish your plant. That may be two or three or five years. If you are going to limit the term to less than 50 years, you certainly ought to give the man his construction period and let him start with a completed plant and not with just a project on paper.

Senator NORRIS. I take it, if the Government takes it over for its value, you would consider all those items, would you not?

Mr. FINNEY. It should; I am not a lawyer, and some of these things you know more about than I do. The Niagara Falls development, I think, started in 1893, and it has not got its entire market yet. There is still power for sale at Niagara Falls. Fifty years is not long for that kind of an enterprise.

Senator NORRIS. Of course that would not follow in a case like the Southern Power Co. I judge it would be entirely different. They sold their power readily and had a demand for more.

Mr. FINNEY. That is true. They are growing very rapidly.

I would just like to transport this plant and put it on the public domain somewhere in the West under the terms of this bill. What would you do with the Catawba plant whose original 10,000 horsepower installation was located on public lands with 28 acres fronting the lake? How much of that plant is the Government going to take over under the provisions of this bill at the end of 50 years; the original installation of 10,000 horsepower or the two or three or five times bigger plant they have at the end of 50 years?

Senator NORRIS. What would you say if we provided in the bill, in a sentence, almost, that if the Government exercised its privilege of taking it over it should do so, paying the value of the property under a law that might be in existence then?

Mr. FINNEY. I think you would have a fine bill in respect to that provision. I do not like a provision that would give so much discretionary power to the Secretary of the Interior, but you may have to do that.

Senator NORRIS. I imagine the engineers, who know more about it than we do, can not have any idea as to what the conditions will be?

Mr. FINNEY. That is perfectly true, Senator. We only know that a continued use is bound to be made of these dams and structures that are in the streams to-day, and they are going to stay there forever. They are built for that purpose.

The CHAIRMAN. What is your suggestion, Senator Norris? To take it over and operate it under the law in force at that time?

Senator NORRIS. Yes, sir.

The CHAIRMAN. I take it that the law in force at that time will still prohibit the confiscation of a man's property.

Senator NORRIS. No doubt about that.

Senator CLARK. Have you any views in regard to the regulation of the power generated either as to its sale or other matters mentioned in this bill? I understood from your reply to Senator Norris that, with the exception of those matters which you have already mentioned, you think the bill is a thoroughly good one.

Mr. FINNEY. I do not think I said it was a thoroughly good one.

Senator NORRIS. I think you said it would be a splendid bill.

Mr. FINNEY. That would be very nearly the equivalent.

Senator WORKS. He said it would be a fine bill.

Senator ROBINSON. He said it would be a fine bill; and he said it enthusiastically, too.

Senator CLARK. That is what I thought.

I am asking you whether you have any opinion as to the regulation to which I called your attention?

Mr. FINNEY. That matter is being rapidly taken care of by public service commissions, not in opposition to the views of the water-power people; because I think a good commission, like some of the States have, is the very best safeguard that the company itself has: but it is regulated in two ways, Senator. It is regulated by the cost of steam, and will be forever, just as long as there is coal available.

Senator CLARK. But here is what I am trying to bring out: Suppose you build your plant and you find yourself in a condition where it is uncertain whether you would be regulated by one governing body or two governing bodies, would that be satisfactory?

Mr. FINNEY. I do not think so. I do not see how you can serve two masters.

Senator CLARK. That is the thing I was calling your attention to. The complaint has been made by some that there is a divided regulation, the Federal regulation impinging upon State regulation.

Mr. FINNEY. In respect to interstate commerce, you mean?

Senator CLARK. Yes; I mean in respect of governing the transmission and rates and limitations which should be put on the operations of the company. It has been suggested that there is a possibility of conflict in the bill?

Mr. FINNEY. There undoubtedly is.

Senator CLARK. Would that be satisfactory to you? Do you think it would be a fine bill in that respect?

Mr. FINNEY. No; I should not think so, in that respect. I think that the regulation of interstate commerce is inherent in Congress, and they are going to exercise that right whenever they want to do so, and the transmission of electric power from one State to another is clearly interstate commerce.

Senator SMOOT. The transmission of electric power is?

Mr. FINNEY. Electric power which crosses a State line. Intrastate does not come under that, but I think that is going to be cured, because I am not one of those people who has seen the so-called Water Power Trust. I have yet to see the water-power plant anywhere in the United States that is not keen to get any business it can, and to get it, sometimes, at prices ridiculously low in order to get a load on their plant.

Senator CLARK. That was not the point to which I called attention; but it has been said that this bill attempts to impose governmental regulation upon purely intrastate business. Would the bill be satisfactory if it does that? Some of the California people seem to think that the bill might be construed as operating that way.

Mr. FINNEY. You are leaving so much power to the discretion of the Secretary that if you get to considering that I do not know just where I would get off. He has more power than is safe to lodge in any one man, no matter who he is.

Senator CLARK. Then would you think that this bill would be satisfactory in that respect?

Mr. FINNEY. I have said that it would be very much improved if it did not lodge so much control in the Secretary. As I regard it, he has control of the financial plan, even the approval or disapproval of the financial plan that may have been approved by the regulating power of the State. I think there are a great many opportunities for conflict.

Senator CLARK. That is what I wanted to call your attention to, to see whether there were any more conditions than those you have already mentioned in answer to Senator Norris's questions.

The CHAIRMAN. You assented to Senator Norris's question that the bill would be much improved if it provided that in the event the Government should take it over at the end of the term it should pay the fair value of the property under the then existing law. Do you mean by that to include the unearned increment?

Senator NORRIS. I did not include that in my question.

The CHAIRMAN. I am asking whether he included it in his answer.

Mr. FINNEY. I do not know what the Supreme Court of the United States would hold 50 years from now as being the fair value.

The CHAIRMAN. Would you hold, as your idea, that that would include the unearned increment?

Mr. FINNEY. I do not believe there is going to be any unearned increment. I am old-fashioned enough to think that the man who establishes a great business, if he has been regulated as to the amount of profits he has been making, is entitled to get pretty much all he can if he turns it over to somebody else. If he has been limited to an 8 or 10 per cent interest on his investment during all those years there is not going to be any unearned increment.

The CHAIRMAN. The country has developed around him, which produced an unearned increment, which he has never gotten out of his earnings?

Mr. FINNEY. It does not increase the value of his land in the ordinary case. In case a man had built a substation in a part of the town that became very valuable, it might, but in the main, 50 years is not going to bring any increase in transmission line rights of way or property that is useful for that purpose. It is not in the way of much increase.

The CHAIRMAN. Fifty years brings a great deal of increase in the West, sometimes.

Senator NORRIS. I think, Mr. Finney, you do not grasp the question the chairman is asking. Perhaps it would be more easily understood if he referred to the good will in appraising the property, whether there ought to be anything allowed for the good will of the business?

Mr. FINNEY. I say that it ought to be paid for on the basis of a fair valuation as a going concern.

Senator CLARK. Which includes good will?

Senator SMOOT. There can not be any good will in a regulated utility.

Mr. FINNEY. How many public utilities have good will, anyhow, as an asset?

Senator NORRIS. If you go to buy one you will find they have quite a lot of it.

Senator SMOOT. The company is absolutely controlled as to what it shall charge by public-utility commissions.

Mr. FINNEY. That is perfectly true. Therefore I can not see how there is going to be this large unearned increment.

Senator WORKS. I suppose the chairman intended to include the increase in the value of the property, the real estate, for example, and everything that is not the result of investment in property.

The CHAIRMAN. Everything, including the extension of the business, and pretty much everything incident to 50 years' growth, is my understanding of what is included in that term.

Mr. FINNEY. It does not make much difference whether you are earning 8 per cent of $8,000,000 or 8 per cent on $100,000,000, it is only 8 per cent, as I regard it.

Senator WORKS. It would make a good deal of difference when you came to buy it.

Mr. FINNEY. If there is $100,000,000 there, how are you going to avoid buying it at $100,000,000? Seemingly, Senator, that is the only fair way to look at the thing.

The CHAIRMAN. If it cost $100,000,000, I understand the Government, when it takes it over, will pay that actual cost, under the Ferris bill.

Mr. FINNEY. Under the provision of this bill; perhaps yes.

Senator NORRIS. There may be a difference, and usually is, between what is called the reproduction value and the cost value, and still another difference between the reproduction value and the value as a going concern. If you buy out a man who is running a store, you would not only pay him for the actual property that you got possession of, but you would probably have to pay something for what he called the good will. He had an established business—trade that you would fall into—which you would have to pay for if you bought it.

Mr. FINNEY. Does that apply to this business?

Senator NORRIS. That is the question involved, as I understand the chairman's question.

Mr. FINNEY. Here is a community that has a connected load which is being served by a water-power company, which is the only power company serving the community, and it has to go to that power company for its power, and it does not seem to me that there is much good will involved in it. I may not have put that quite clearly, but I do not believe that there is going to be a large increase in the value of the physical property of a hydroelectric system. Of course every increase in growth is going to make it a better business proposition. The more connected load you get on, probably the more money you are going to make, because the larger the plant, usually, the greater the efficiency of the operation. Diversity of load helps

very materially, so that the larger the plant is the better project it is, and the cheaper you can make power, as a matter of fact.

Senator STERLING. You would not think, Mr. Finney, that more than the actual cost of the rights of way, of all water rights, for the lands and interests, should be considered or taken account of in taking over the property, would you?

Mr. FINNEY. The actual cost including carrying interest charges?

Senator STERLING. No; the actual cost of the right of way?

Mr. FINNEY. Well, what is the actual cost of the right of way at the end of 50 years? Is it not the original cost in dollars and cents and its carrying charges all those years?

Senator NORRIS. Have you not received back those carrying charges?

Mr. FINNEY. How?

Senator NORRIS. By the sale of electric energy?

Senator SMOOT. That is a part of your capital, you know, and you get that out of your expenses and earnings?

Mr. FINNEY. Well, maybe. I can not qualify as an expert in such matters of involved finance.

Senator STERLING. The question in my mind is whether, having been paid the actual cost of the right of way, water rights, and interests, and then the reasonable value of the rest of the property, all structures and fixtures acquired or erected or placed on the land—whether he is not getting then just about what he ought to be paid?

Mr. FINNEY. I do not think there is a great deal of difference there, Senator, between us. The actual cost may be more than it is worth at the end of the 50-year period.

Senator STERLING. Well, on the whole, would you not say that was the fair value of the property, using the term that you used a while ago? Of course it omits the element of good will, but you say yourself that that does not amount to much, if anything, in a public-utility matter.

Mr. FINNEY. I do not believe it would make any material difference to the investor if that language was retained in the bill with the proviso that all the property must be taken over and not to segregate it in the judgment of any departmental chief to select what he thinks he ought to buy and leave what he thinks he does not need.

Senator STERLING. No tangible property is segregated at all. What we are considering is the increased value of the franchise or profits yet to be earned on pending contracts. There is no segregation of any part of the plant or separation of the property.

Mr. FINNEY. As I have heard the testimony here that seems to be the prevailing opinion. Where is that?

Senator STERLING. That is on page 5 of the bill.

Senator CLARK. It is at the end of section 5.

Senator STERLING. Yes; section 5.

Mr. FINNEY. Well, this applies with a good deal of force to the plant that is wholly on Government land, but what is he going to buy? What is he going to buy in the case of a plant that is almost totally on privately owned land? Is he going to use the mere fact of the use or lease of an acre of land, or an infinitesimal part of the land as an excuse to take over the whole plant, or would he be satisfied to take that portion of the plant that is on public land?

Senator NORRIS. Now, of course, from the investor's standpoint, from what you said awhile ago you thought that was objectionable. Now, I judge from that question that the man who has built it up might object to selling any more than what was on the public land. From the investor's standpoint, which would be the better?

Mr. FINNEY. To sell it as a whole, of course, if that land was essential to the operation of the plant, or represented any part of the plant without which he could not do business. Otherwise he would be left in a dickens of a fix.

Senator NORRIS. If you did not take it all?

Mr. FINNEY. If you did not take it all.

Senator CLARK. The bill provides that it shall be all taken.

Senator NORRIS. That is my understanding.

Senator CLARK. I think the bill provides that very clearly in section 5. It says:

> The United States shall have the right to take over the properties which are dependent in whole or in part for their usefulness on the continuance of the lease herein provided for, and which may have been acquired by any lessee acting under the provisions of this act.

Senator WORKS. Yes; but Senator Clark, as in the case of the Southern Co., there may be independent sources of water power, where the plant is not on Government land at all which are not dependent upon the leased property. What are you going to do then?

Senator SMOOT. Or there may be a steam plant.

Senator WORKS. Yes. Then what are you going to do? Will you take over the whole system or only that part of the system included in the property leased?

Senator CLARK. I think they should take over the whole system.

Senator NORRIS. In other words, under this bill you could not get those other properties unless it was approved by the Secretary of the Interior.

Senator CLARK. If they take it over, they ought to take over the whole property.

Senator WORKS. I do not think that is so. That which is on private land does not require any consent from the Secretary of the Interior.

Senator SMOOT. What would be your opinion of the provisions of the bill in a case like this: A plant having 134 miles of transmission lines, costing at least $13,500 a mile for the transmission lines, with high voltage of at least 44,000 volts, and some of it even greater than that, and in 30 years from now they should be distributing current through the air. What would be your opinion, under the bill, as to the position the Government should take in relation to paying for the actual right of way and for the distribution lines?

Mr. FINNEY. I do not think you could buy the transmission line, because, under those conditions - -

Senator SMOOT (interposing). All they would buy would be the stations.

Mr. FINNEY. All they would buy would be the stations.

Senator NORRIS. Would that not be fair? Suppose a private party was going to buy it; would he pay anything for the old junk that was not any good? Would not that apply to a wheel in your engine, for example? If you are going to buy that, if you have one that

is out of date, and you would have to throw it aside, you would not expect the Government to pay for it, would you?

Mr. FINNEY. No; I presume not.

Senator SMOOT. But if you are going to sell it to an individual or a company you get the enhanced value of that plant, and you get at least a part of that back, whereas under this bill you could not get any of it back?

Mr. FINNEY. That is perfectly true, Senator.

Senator NORRIS. Perhaps so, unless that happened just before it was turned over, and it would not happen that way under a lease, because you would not do it if you were a lessee. If it happened at any other time, you would have gotten a return for that, otherwise you would not have installed it.

Mr. FINNEY. We would have gotten it, or, at least, we would have had the hope of getting it.

Senator NORRIS. Of course you would not put it in unless you thought there was money in the proposition of putting it in?

Mr. FINNEY. That is very true. Investment is not made except with the hope of gain.

Senator NORRIS. Exactly.

Mr. Chairman, I understand Mr. Finney has given some consideration to the water-power possibilities of Great Falls here, and I would like to inquire of him, if he has, to what extent?

Mr. FINNEY. We have at our door, within easy transmission distance of Washington, Great Falls, which has some power possibilities. I think those power possibilities, certainly for a plant located at Great Falls, have been very greatly overestimated. I can not conceive that a plant located at Great Falls would be of very much commercial value, but I do believe that it is possible to develop Great Falls by coming down the river, under a plan which has been proposed by an eminent engineer, very greatly to the benefit of Washington as a community, and I hope some of these days it will be done.

Senator NORRIS. What investigation, Mr. Finney, did you make of the subject?

Mr. FINNEY. I investigated Great Great Falls as a power project about 15 years ago.

Senator NORRIS. Just on your own initiative or for some company?

Mr. FINNEY. For a company which wanted very much to develop it, but the question of title is very much involved. The use of the water for domestic supply of Washington comes into that, and there is nothing like the power there at Great Falls that most people think. It is a very difficult project.

Senator NORRIS. Did you make a careful survey of it?

Mr. FINNEY. Yes; as I recollect it, very careful surveys and a very careful estimate was made. Of course, the figures have gone out of my mind, but, as I recall it, the amount of power is comparatively small.

Senator NORRIS. Did you make a report of it, and is your report in existence somewhere?

Mr. FINNEY. I do not know but that it is; but I have not seen it for some time.

Senator NORRIS. Is it printed?

Mr. FINNEY. No; it was an engineering report, in manuscript. It may be available, and if it is, Senator, I will be very glad to send and get it.

Senator NORRIS. Have you any objection to telling us for what company you made the investigation?

Mr. FINNEY. No; it was for the Stanley Manufacturing Co., of Pittsfield, Mass.

Senator NORRIS. Did they have some interests there—some rights?

Mr. FINNEY. No. It was made in the hope of selling the generating equipment to parties who proposed at that time to develop it.

Senator NORRIS. I would like to know the parties who proposed to develop it.

Mr. FINNEY. Well, just what financial interests were behind it I do not know. But my dealings and most of my work was with a man named Patterson. Mr. Patterson turned out to be rather a four-flusher, and when the amount of money was named which it would take to develop the project he very soon lost interest in it.

Senator NORRIS. What was the amount?

Mr. FINNEY. Senator, I believe it was about $4,000,000. My recollection is that it was a little over 20,000 horsepower which was available, at about $200 per horsepower.

Senator NORRIS. How many dams were contemplated; do you remember?

Mr. FINNEY. One dam.

Senator NORRIS. Where was it to be constructed?

Mr. FINNEY. Just about where it is now—above the falls.

Mr. FINNEY. It was above the present falls, and the water was to be carried around.

Senator NORRIS. Did you ever investigate, then, the possibilities of building a dam 9 miles on this side of the falls, backing the water up to the falls?

Mr. FINNEY. That is the project I referred to as being planned by an eminent engineer, and that, I think, has great possibilities.

Senator NORRIS. Do you refer to Col. Langfitt, the United States engineer?

Mr. FINNEY. The engineer I refer to is Mr. Leighton.

Senator NORRIS. He was working under Col. Langfitt, was he not?

Mr. FINNEY. Possibly so.

Senator NORRIS. You have examined the report, have you, Mr. Finney?

Mr. FINNEY. Not as carefully as I want to.

Senator NORRIS. Do you know, in a general way, that it was favorable, and that they recommended to Congress the development of the water?

Mr. FINNEY. Yes.

Senator NORRIS. Do you know how much water power they estimated could be produced by that?

Mr. FINNEY. No; I do not recall that, sir. But it was very much in excess of the power available at Great Falls.

Senator NORRIS. Oh, yes; they did not use the Great Falls?

Mr. FINNEY. No; they did not use Great Falls at all.

Senator NORRIS. That did not exhaust the possibilities of the power, I believe, not much more than half, or perhaps two-thirds. That cost about $15,00,000, as I remember it.

Mr. FINNEY. Yes; butI think that involved a very large increase in the pumping capacity. It was a combined water-power and water-supply project.

Senator NORRIS. Yes. It involved an increase and included an increased water supply for the city of Washington.

Mr. FINNEY. Which will finally have to be done, of course, according to one plan or another.

Senator NORRIS. As you understand it, from the investigation you have made of this plan adopted by the engineers, do you think it is a feasible proposition?

Mr. FINNEY. It is a feasible proposition from an engineering standpoint. Solely as a source of hydroelectric power, it is not a commercial possibility. But when it is combined with the increased water supply in the city of Washington, it looks attractive. I think enough engineers of prominence have passed on it, however, to say that I could accept their verdict that it is a good project. But if it were solely for power development, commercially, it would not stand the $15,000,000 investment for the amount of power available.

Senator NORRIS. You have a maximum horsepower of nearly 100,000?

Mr. FINNEY. Not at all periods.

Senator NORRIS. No; that was the maximum. The average is about 50,000 or 60,000. It involves, as I believe you will agree with me, as most hydroelectric propositions do, an auxiliary steam plant, which the Government already has and owns now.

Mr. FINNEY. I think it is a very valuable thing to consider in connection with the Government needs, if the Government wants to do it and compete with the existing company.

Senator NORRIS. The question involved as to competition with another company, or its use, was not involved, really, in Col. Langfitt's report, based upon the opinions of several other engineers, among them Mr. Leighton, and I have forgotten who the other was, but a very noted hydroelectrical engineer from New York was on the staff at the time this survey was made. It only involved the production of hydroelectric energy and the carrying of it to substations, and included the erection of these substations in the city of Washington.

Mr. FINNEY. To whom was the power to be sold?

Senator NORRIS. That was not considered?

Senator ROBINSON. Senator Norris, what has all this to do with the bill?

Senator NORRIS. Possibly nothing. But this is a water-power discussion, and it always seemed to me that right under our noses is one of the greatest possibilities in the United States, and that we ought to be getting, in this Capital City, the benefit of it.

Mr. FINNEY. I think it would be a striking object lesson if we could get that in the Capital.

The CHAIRMAN. Is there anything else to ask of Mr. Finney? We thank you, Mr. Finney.

STATEMENT OF HON. S. M. STOCKSLAGER, OF WASHINGTON, D. C.

Mr. STOCKSLAGER. Mr. Chairman and gentlemen of the committee, my name is S. M. Stockslager: my legal residence is in Indiana; I am a member of the law firm of Stockslager & Heard. I have been

engaged in the practice here since my resignation of the position of Commissioner of the General Land Office in 1889, devoting my attention largely to the practice in public land and mining cases. I represent the Northern California Power Co. Consolidated. The Northern California Power Co. was originally a California corporation, and I believe all of the subsidiary companies since the consolidation are California corporations.

In Walker's Manual of California Securities and Directory of Directors in the edition of 1913 it is stated the company—

supplies Shasta, Tehama, Glenn, Butte, and Colusa Counties with electric light and power; water and gas in Redding, water and gas in Willows; gas plant, Red Bluff. Has 625 miles high tension and 700 miles low tension lines. Has acquired all business and property of the Sacramento Valley Power Co., including local distribution in Chico and 3,000 horsepower generating capacity

I also represent what was known as the Kuhn Bros. project at Twin Falls, Idaho, and other places in Idaho. Last July the company was dissolved and the business was distributed and taken over by various bondholders and other companies, and I represent all of those companies to the extent that their interest may be involved in this bill.

Senator CLARK. When it was dissolved, was the Twin Falls Co. absorbed by these California companies?

Mr. STOCKSLAGER. There were a number of them, but they were all owned by the Kuhn Bros. in Pittsburgh.

Senator CLARK. Did they also own the California company?

Mr. STOCKSLAGER. No; it has no connection with the California Co. at all.

Senator CLARK. That is what I wanted to bring out.

Mr. STOCKSLAGER. The parties who took over those properties are as follows:

The Great Shoshone & Twin Falls Water Power Co. and the Southern Idaho Water Power Co. are now controlled by the American Water Works & Electrical Co. of New York.

The Salmon River project, by Mr. A. C. Robinson, of Pittsburgh, Pa. He is chairman of the committee and possibly a bondholder. I do not know exactly how that is.

The Oakley project, by Mr. J. H. Puelicher, of Milwaukee, Wis.

The Twin Falls North Side Land & Water Co., which includes the Twin Falls North Side Improvement Co., and the Kuhn Irrigation & Canal Co., by Mr. W. A. Durst, of Minneapolis, Minn.

Those propositions or projects are nearly all under the Cary Act. I am not sure that they have any direct interest, but to the extent they have any interest I represent them.

I had thought at one time of suggesting an amendment to the committee to this bill, but I feel quite certain that it would not be germane, at least some parts of it, but I will read it as giving my views as to how the law should be construed, and if it has not already been so construed, if that is not the proper construction of it, then I ask that it be construed in that way. This is an amendment to section 10.

Section 10 provides:

That where the Secretary of the Interior shall determine that the value of any lands heretofore or hereafter reserved as water-power sites or for purposes in connection with water-power development or electrical transmission will not be materially injured for such purposes by either location, entry, or disposal,

the same may be allowed by applicable land laws upon the express condition that all such locations, entries, or other methods of disposal shall be subject to the sole right of the United States and its authorized lessees to enter upon, occupy, and use any part or all of such lands reasonably necessary for the accomplishment of all purposes connected with the development, generation, transmission, or utilization of power or energy, and all rights acquired in such lands shall be subject to a reservation of such sole right to the United States and its lessees, which reservation shall be expressed in the patent or other evidence of title: *Provided*, That locations, entries, selections, or filings heretofore allowed for lands reserved as water-power sites or in connection with water-power development or electrical transmission may proceed to approval or patent under and subject to the limitations and conditions in this section contained, but nothing herein shall be construed to deny or abridge rights now asserted by loss of those seeking to use the public lands for purposes of irrigation or mining alone.

Now, you except practically only irrigation and mining. I think an amendment, a slight part of which would not be germane, I deem proper to that section might be as follows:

Provided further, That all selections or filings made in good faith in accordance with law and departmental regulations, by qualified applicants, of lands subject thereto, filed in the local office before withdrawal of the lands under the act of June twenty-fifth, nineteen hundred and ten (Thirty-sixth Statutes, page eight hundred and forty-seven), shall proceed to approval or patent notwithstanding such withdrawal and notwithstanding the provisions of this act.

Senator CLARK. In other words, that enlarges this section so that it gives title in fee, instead of a surface patent to these lands?

Mr. STOCKSLAGER. Well, it could be done in a very few words.

But now as to the act of 1910, you gentlemen all know that you lodged very extraordinary powers in the Secretary of the Interior, who was authorized to withdraw lands for classification and power sites and some other matters mentioned, and for all other public purposes, and that statute excepts only homestead entries, desert-land entries, settlement claims, and some mining claims; and it leaves out school-indemnity selections, soldiers' additional selections, forest lieu selections, railroad selections, and all scrip locations of all kinds whatsoever. There is no protection whatever to anyone whose claim has not ripened into an entry or who has not settled on the public lands, except possibly mining claims.

Now, I want to call attention to a condition of affairs that exists with the California Power Co.

Some years ago, a short time before the fire and earthquake in San Francisco, this company, which was a going concern at the time, having considerable interest up in the Pitt River region, conceived the idea of smelting iron ores in the mountains of California with electricity. The company spent $50,000 in having experts from Austria and other places to experiment with the smelting of those ores by electricity. Mr. Garfield, who was then Secretary of the Interior, was present when they made the first rail smelted from the ore from those mountains. As you gentlemen know, there is no coal in these mountains, but the iron ore is present, as I am told, in great abundance, and if it could be smelted by electricity cheap enough it could compete with iron shipped from Japan or from the eastern part of this country, but as it is it is of no value whatever. The company located a water right near the Great Bend of the Pitt River and complied with all the law in the State of California. They had a man by the name of Johnson, who had been employed as chief engi-

neer, doing all of their work, who had a free hand and employed all of their assistants, and they spent about $5,000—at least that much—in making surveys, levels, etc., and he made a report to the company that the project was feasible; and that project was to select 18 acres of land within the Shasta Forest Reserve for a dam and reservoir, and a ditch about a mile long to get outside of the forest reserve. Everything else was outside, on privately owned land.

Now, that project was to bore a tunnel 8 miles long and 10 feet in diameter through the mountain in order to get a fall of a thousand feet and turn the water back into the river.

About the time of the fire, or after the fire, it was discovered that all of the reports, etc., that had been made by their engineer had been destroyed, and they had nothing left but a blue print; and acting under the advice of their counsel, they simply filed that blue print; but the regulations required that it should be filed in duplicate or in triplicate on tracing linen, and the certificate of the engineer was also required that the company had complied completely with the regulations.

And while this man Johnson was still in their employ, on other projects, he took a party with him and filed a water location, and a complete application for this reservoir site and dam, a project that he had been surveying and had been paid $5,000 on for the Northern California Power Co.

Senator NORRIS. Do you mean that he filed that for himself?

Mr. STOCKSLAGER. For himself and another party whom he took in with him; it was Gates & Johnson.

When the company found that their application would not be received until they had a new survey—this man would not certify it—they employed another engineer; but before he completed his work he was attacked with typhoid fever, and it was quite a long time before they could get their papers completed and get their application filed. In the meantime Johnson claimed that he had sent copies of his work to his son in Pennsylvania and was unable to get a complete filing before the filing of the Northern California Power Co. was completed.

Now, that application was made under the act of 1875, which gives a permanent tenure for manufacturing, municipal, and mining purposes. Inasmuch as they expected to use a very large part of the power generated for the manufacture of iron and steel, they conceived that it was proper to make their application under that statute in the Interior Department.

Mr. SHORT. Excuse me, you refer to the act of 1875; you mean the act of 1895, do you not?

Mr. STOCKSLAGER. You are right; I have the wrong date; I was thinking about the railroad act.

The Interior Department, however, held that, inasmuch as the company would perhaps sell a part of its power, as it was doing then, for street car purposes, lighting, and other commercial purposes, therefore it did not come within the terms of that act; that a grant could be given under that act only where the whole plant was to be used for manufacturing or for mining or for municipal purposes, which, as I insisted at that time, would drive every

municipal corporation to public ownership before they could get the benefit of that act. However, the Secretary held that it might be transferred to the Department of Agriculture, under the act of 1901.

So, the two applications were transferred to the Department of Agriculture and after a long contest there, it went finally to the Secretary of Agriculture, and he held that, although all of this fraud on the part of Jonhson was not disputed at all, he had no power to go into the question of fraud at all; he absolutely refused to look into it in any way, and granted Johnson the permit and put our people out.

And so far as I know there has been nothing done there. The company propose to put $10,000,000 in the project; and when the superintendent of the forest reserve was called upon to report what would be the proper charge he reported that as it was a $10,000,000 project they ought to pay $10,000. They wanted only 18 acres in the forest for their dam and reservoir sites and the little ditch going out. Now, when that occurred, in order to keep up with their growing business the company bought land in a number of other places, and bought four or five plants and developed and improved them, until I have a statement here from their engineer showing that they have expended up to this date on these plants—and I will call your attention to it in a moment to show how they have proceeded in the development—the sum of $3,353,000.

Senator CLARK. How much horsepower have they developed?

Mr. STOCKSLAGER. I could not tell you that; I am not an engineer.

Senator CLARK. I did not know but what you would have the figures.

Mr. STOCKSLAGER. Of course that is stated in the affidavits that they have filed, but I do not know myself.

Senator WORKS. Is that owned by California people?

Mr. STOCKSLAGER. By the California Power Co., Consolidated.

Senator WORKS. I mean is the stock of the company owned by California people.

Mr. STOCKSLAGER. Well, I do not know about that. The ultimate cost of the projects that they have now—they had to abandon the other—will be $5,670,000.

Under the advice of their attorneys, after locating these power sites and appropriating their water and constructing their dams, they found that they would have to go over the public lands in some places to convey the water; and they obtained from the State school indemnity scrip and located, in 1907, 1908, and 1909, their scrip covering the lands they would have to go over in order to get to their plants.

Now, Mr. Britton, in his statement the other day, was mistaken; probably he meant that these particular matters were pending; but not a single one of these dams or reservoirs are on public lands; they are all on private lands. The only thing that the company asks is the right of way over the public lands, and the only part of these scrip locations that they want, in one case, is 140 feet across the corner.

Now, long after the scrip was filed, and long after most of the improvements were made, this act of 1910 was passed, and three or

four years afterwards—in 1913 or 1914—the land was withdrawn for power-site purposes.

With a view to having the Geological Survey report that the lands were of no value for power-site purposes, outside of these particular plants, and as all of the available water is held by the company, we asked the Geological Survey to recommend that the withdrawal be set aside as to these lands.

The report of the Geological Survey was not very definite; it was a little disingenuous, I think. We asked them whether the land had any value for power-site purposes aside from these projects. They did not answer that question, but simply said that it is valuable for power-site purposes, because it is being used by these people, and recommended that we should apply under the act of 1901—which, as you know, gives a revocable permit—and this was after we had spent $3,500,000.

Senator CLARK. How far is this land of which you now speak from the power sites proper?

Mr. STOCKSLAGER. I do not know. I have a map showing all of those locations and I will bring it up to-morrow.

Senator CLARK. Well, it is not of great importance. But it does not join your power sites proper, does it?

Mr. STOCKSLAGER. I think not; not all of them, certainly.

Senator CLARK. Would none of your power houses be located on any of the land to which you want to apply the scrip?

Mr. STOCKSLAGER. None of the power houses, none of the reservoirs, and none of the dams. I asked that question specifically of the engineer, and in his letter, which I will file with the committee, if necessary, he says:

> None of our dams or power houses are located on the land under controversy; they are school lands.

I asked him that question because I was not certain whether they were or not.

Senator STERLING. And the land is simply desired for transmission purposes?

Mr. STOCKSLAGER. That is all—for transmission purposes, and probably for ditches and conduits to carry the water.

Now, up to July 15, 1914, these cases were adjudicated by the department, and in those involved—there are 10 of these locations by that company—the commissioner called upon the company to show cause why its selections should not be canceled because of the withdrawals for power-site purposes. They made quite an elaborate showing, and their engineers demonstrated, as they thought, that the land had no power-site value whatever, except for the purposes for which they were going to use it, and that the Government owned no part of the power site or the water.

I say, up to July 15, 1914, they adjudicated those cases; but on that date the Secretary of the Interior issued what he called an administrative ruling, which may be found in volume 43 of the Land Decisions, at page 293, under which he holds that these withdrawals having been made by the President, that he is without power to take any step or to give any relief whatever. I will furnish a copy of that ruling for the record.

(The ruling referred to by Mr. Stockslager is as follows:)

ADMINISTRATIVE RULING JULY 15, 1914.

LANE, *Secretary:*

Many forest reservations when created included lands claimed by or patented to private parties. Under the law (act of June 4, 1897) these settlers or owners might, if they chose, select other vacant land in lieu of such holdings. So, too, as to railroad grants. If it was found that these contained mineral lands or were already settled, the railroad concerned was given the right to take other lands. And the States to which the Federal Government made certain grants might, under conditions specified in the law, select other lands in their stead.

Certain of these selectors now claim patents, or ask the approval of their lists of selections. As to most of these selections there can be no question but that patent should issue. As to some, however, the Government itself has intervened, Congress having authorized their withdrawal for certain public purposes.

This question, therefore, is now presented: Is the Secretary of the Interior free to dispose of these selected lands, in the face of the act of Congress withdrawing them from disposition?

It is my conclusion, after a careful study of the authorities, that no such authority has been given to the Secretary of the Interior. The acts of Congress authorizing exchanges are merely offers on the part of the United States to exchange other lands for lands held by the selector, and the right of the selector does not attach nor equitable title pass upon mere presentation of the requisite papers. There remains the necessity for action upon the offer by the duly authorized officer of the United States. Until that acceptance has been given and the equitable title passed Congress has full authority to devote the land to a public purpose.

The act of June 25, 1910 (36 Stat., 847), specifically authorizes the President to withdraw public lands from disposition and to reserve same "for water-power sites * * * or other public purposes," and directs that such withdrawals or reservations shall remain in force until revoked by the President or by Congress. Congress enumerated in the act the exceptions from the effect of such withdrawals: (1) Certain mineral claims; (2) homestead or desert land entries made prior to withdrawal; (3) lands upon which valid settlement had been made and is being maintained to date of withdrawal.

Thus Congress recognized that there were certain claims which the Government would except from the effect of its own withdrawals; and, because no exceptions whatever were made which, in letter or spirit, would apply to exchanges like those involved in forest lieu, State, or railroad selections, I am compelled to the conclusion that Congress intended to make its withdrawal superior to these classes of claims.

Congress having power to withdraw lands and devote them to a public use, notwithstanding the existence of the inchoate claims mentioned, having authorized the withdrawals and reservations by the act cited, and withdrawals having been made for public purposes, as prescribed in the act, the Secretary of the Interior has no power or authority to approve or accept such selections or exchanges or to relieve them from the force and effect of an existing reservation.

(Authorities: Frisbie v. Whitney (9 Wall., 187); Rector v. Ashley (6 Wall., 142); Yosemite Valley Case (15 Wall., 77); United States v. Hanson (167 Fed., 881); Shiver v. United States (159 U. S., 491); Russian-American Company v. United States (190 U. S., 570); Union Pacific v. Harris (215 U. S., 386); Stricker v. The Oregon Short Line (225 U. S., 142); Soscol Ranch (11 Ops. Atty. Gen., 490); Cosmos v. The Gray Eagle Oil Company (190 U. S., 301); Clearwater Timber Company v. Shoshone County (155 Fed., 162); Roughton v. Knight (219 U. S., 537); Daniels v. Wagner (205 Fed., 235).)

Mr. STOCKSLAGER (continuing). The effect of that ruling, of course, is that we are simply tied up; the Secretary refuses to do anything.

In a brief filed by us we urged the Secretary to recommend to the President the setting aside of this withdrawal. These withdrawals, as everyone knows, of course, are not made by the President on his

own motion; they are made on the recommendation originally of the Geological Survey.

Senator CLARK. Let me ask you a question there: Now, there have been many instances where lands included in withdrawals of various sorts and for various purposes have been restored to general entry.

Mr. STOCKSLAGER. Yes.

Senator CLARK. And I have always been under the impression that that was done under the recommendation of the heads of two or three different departments; and it hardly seems possible that the head of the department would say that he had no authority in the matter, or no power in the matter, to act, either by way of recommendation to the President or otherwise.

Mr. STOCKSLAGER. That is exactly the effect of the act of July 15, 1914, and, as I understand, they will consider nothing. Finding that condition of affairs, I, for the benefit of the company, called upon the Geological Survey——

Senator CLARK (interposing). Well, I know my experience has been that I have called upon the Director of the Geological Survey, who is here present——

Mr. STOCKSLAGER. Yes.

Senator CLARK (continuing). In regard to the elimination of lands, and he has consumed a great deal of his valuable time, if he had not had the authority or the power to do something in regard to this.

Mr. STOCKSLAGER. Well, up to July 15 last, it was frequently done. But I do not think the Secretary—the Secretary might recommend to the President to eliminate them; I do not know as to that.

Senator CLARK. Well, of course, that is all that the Secretary could do. I suppose the power that withdraws is the power that must restore.

Mr. GEORGE O. SMITH. Will you please read that last paragraph of the Secretary's ruling of July 15, 1914, Mr. Stockslager.

Mr. STOCKSLAGER. (Reading:)

Congress having power to withdraw lands and devote them to a public use, notwithstanding the existence of the inchoate claims mentioned (that is, everything else except those that are completed homesteads, etc.) having authorized the withdrawals and reservations by the act cited, and withdrawals having been made for public purposes, as prescribed in the act, the Secretary of the Interior has no power or authority to approve or accept such selections or exchanges or to relieve them from the force and effect of an existing reservation.

Senator CLARK. Well, I misunderstood your statement; that is, that paragraph does not give me to understand exactly what your statement gave me to understand.

Mr. STOCKSLAGER. Well, I probably should have read it in the first place.

Now, it would seem to me that there ought to be some way by which investments of that kind could be protected; and, so far as the law is concerned, my opinion as a lawyer is that there is no kind of doubt that those selections are valid and create an equitable estate. But you can not get into the courts; so long as the Secretary refuses to do anything and holds the title, it is impossible to get into the courts. There is no possible way that I know of that you could bring any proceeding to test that question; and if he refuses to do anything, claiming that he has no authority, it leaves us helpless.

That is the main matter that I wanted to call to your attention, because it is a concrete case, and, as Mr. Cleveland once said, it is a condition and not a theory.

Mr. Lane, the present Secretary of the Interior, is reported by the Washington Star a few days ago as saying in his annual report:

> It can not be unknown to you that there is throughout the country, more especially in the Western States—which, because of their ambition, are naturally impatient of obstruction—a very real fear of what is called "the bureaucracy of Washington." This is said to be a "system" or organized machine, the spirit of which is to oppose action or to effect negative action. It is visualized as either cynical or malevolent, altogether out of sympathy with those who needs must come to the Government for some form of help, and so wound round and round with the red tape of officialdom as to resemble a barbed-wire entanglement which, if not absolutely impregnable, is only to be passed through after much suffering and toil.

The Secretary is a California man, and he knows a great deal more about that matter than I do—but certainly we have had the suffering and toil in our case.

I thank you for your attention.

The CHAIRMAN. Mr. Stockslager, how much investment has that company on public lands now?

Mr. STOCKSLAGER. No investment to amount to anything. It has only a transmission line, or ditches—I do not know exactly, but it is comparatively small. I think I can give you the exact information. I have the information, but not with me.

The CHAIRMAN. The investment is practically on private lands, is it?

Mr. STOCKSLAGER. Oh, yes; the dams, power sites, and plants of the company are all on privately owned land. They bought land from the Southern Pacific Railroad and from other private interests, wherever they could; and all they want is their right of way over the public lands; and the matter is still before the Secretary of the Interior; but I suppose under this order of July 15, 1914, he will take no action whatever.

Senator STERLING. Have you any suggestions or criticisms to make upon this bill?

Mr. STOCKSLAGER. Well, I do not know nearly as much about it as the gentlemen who have been talking on the subject. I am not an engineer. I never was enamored of any system of leases. We tried that in Indiana, in our school lands, and abandoned it more than 50 years ago, and I had hoped that there might be some method devised by which permanent titles could be given and the Government properly protected.

STATEMENT OF SAMUEL HERRICK, ESQ., ATTORNEY AT LAW, WASHINGTON, D. C.

Senator STERLING. Mr. Chairman, Mr. Samuel Herrick, of this city, would like to be heard briefly this afternoon, I understand.

The CHAIRMAN. Very well; we will hear Mr. Herrick now.

Mr. HERRICK. I have a very brief statement to make, Mr. Chairman. I am a practicing lawyer in this city, but I am a legal resident of the State of South Dakota.

There have been criticisms made at this hearing of the action of certain companies in investing money upon revocable permits. In

justice to those companies I wish to set forth the reasons which actuated those investments, as they were made not carelessly and blindly but after careful considerations of the laws on the subject, and with the firm belief that the permits were irrevocable after construction of the plants. As to part of those companies I speak from personal knowledge, and as to others from information and belief after consultation with their attorneys.

I have made a specialty of public-land law and mining law for about 13 years past, and in the course of that time I have had occasion to represent a number of power companies and to advise them at different times about the status of their rights of way and as to what could be secured under the United States laws and the regulations of the department, particularly with regard to the act of 1901, which has been mentioned a great deal in these proceedings, and especially the revocability feature of it.

Now I, and I believe other attorneys in this city, have always advised clients that while the act of 1901 had the provision in it that the rights might be revoked at the discretion of the Secretary of the Interior, yet it was my belief that the department would not arbitrarily revoke any such right of way, and that the provision was merely put in there, and would be so construed, to cover rights secured before construction; and that after the plant had been constructed the act of 1866 took effect, that act never having been repealed by any act of Congress; and in my opinion it has never been repealed yet.

This view of mine was gathered not only from a consideration of the law but from interviews with the officials of the Interior Department from 1901 to, say, 1909. Those officials generally advised that the department would not, in their opinion, revoke any rights granted under the act of 1901, or allowed under that act, where the parties had good faith and had in good faith gone ahead and constructed their plants; that the real object of that provision was to prevent the incumbering of the public domain with so-called paper rights of way. The department had found out that under the act of 1891, which grants rights of way or easements for ditches, canals, and reservoir sites for irrigation purposes, many persons had secured rights and held them merely for speculation, trying to sell them for what they could get, and in the meantime that portion of the public domain was tied up and prevented from legitimate development.

Now, it was intended—so they held—to prevent that when the act of 1901 was passed, and accordingly that provision was put in. But both to myself and to clients whom I took to the Interior Department the statement was generally made by the officials that they had no reason to believe that the department would confiscate——

Senator WORKS (interposing). Well, that was not a question of the construction of the statute; it was, of course, merely that the Secretary of the Interior might take that view.

Mr. HERRICK. Yes; simply their belief.

Senator WORKS. Yes; certainly; under the act he had the power to terminate them, had he not?

Mr. HERRICK. I do not believe so; no, sir; not in view of the provisions of that act of 1866.

Senator NORRIS. Well, is it your opinion that after the power plant had been constructed then the act of 1866 took effect and it was irrevocable?

Mr. HERRICK. Yes, sir; it was a vested right.

Senator NORRIS. And the revocability of it applied only to the time prior to the completion of the plant?

Mr. HERRICK. Yes—or I will say up to the expenditure of any considerable sum of money in legitimate steps to complete it.

Senator STERLING. Just what was the act of 1866?

Mr. HERRICK. The act of 1866 provided that "rights of way for manufacturing, mining, agricultural, and other purposes across the public domain are hereby recognized and confirmed."

Senator STERLING. Yes.

Mr. HERRICK. Now, the department held, and the courts also, that in order to secure rights under that statute it would not be necessary to file any maps or papers with the department—the statute took effect, that is—and as soon as the plant had been built there was a right of way secured. But there was nothing on the record to show it; and the act of 1901 appears to have been passed—or at least that was my opinion, and I so advised clients—in order to supplement that by giving them something of record while they were constructing the plant.

Senator CLARK. The Interior Department took a different view of it, did they?

Mr. HERRICK. At the present time, yes, sir; but I was speaking particularly of the time prior to 1909. At that time, as you know, the head of the Interior Department and the head of the Agricultural Department revoked a great many permits; and since then, as shown here this morning, there have been very few plants constructed.

Senator STERLING. They revoked the permits before any work of construction had been done, did they?

Senator CLARK. Oh, no.

Mr. HERRICK. No; that was after some of the plants had been constructed. I represented one company that had put millions of dollars into the construction of plants in one of the Western States; and since the action of 1909 in revoking their permit, and since litigation was started by the Government against them because they would not execute an agreement presented to them by the department covering the permit, that company has been thrown into a receivership. I do not know that the receivership was the result of that litigation, but that is what has taken place.

Senator CLARK. The trouble is, that you should advise your clients hereafter what the action of the department is likely to be. [Laughter.]

Mr. HERRICK. That action of 1909 rather embarrassed those attorneys who advised their clients that the act of 1901 would not be used in such a way.

Senator WORKS. Did that corporation spend those millions of dollars on your advice?

Mr. HERRICK. No; as I say, all the attorneys advised them that way—including the attorneys in New York and the attorneys in the West.

I do not believe there is anything further that I wish to say, Mr. Chairman. I simply wished to make a statement with regard to the way that act was generally regarded.

(Thereupon, at 4 o'clock p. m., the committee adjourned until to-morrow, Tuesday, at 10 o'clock a. m.)

FRIDAY, DECEMBER 18, 1914.

COMMITTEE ON PUBLIC LANDS,
UNITED STATES SENATE,
Washington, D. C.

The committee met at 10 o'clock a. m.

Present: Senators Myers (chairman), Thomas, Robinson, Smoot, Works, Norris, and Sterling.

STATEMENT OF MR. GEORGE OTIS SMITH, DIRECTOR OF THE UNITED STATES GEOLOGICAL SURVEY, DEPARTMENT OF THE INTERIOR.

Mr. SMITH. Mr. Chairman and gentlemen of the committee, as I have listened to these hearings I have been impressed with the fact that the three subjects under consideration have been much the same as the three questions that came up before the House committee and there discussed very fully. Those three questions relative to this kind of legislation were: (1) To what extent the legislation should be mandatory in terms; (2) what is the proper coordination of Federal and State functions with respect to the development of water power in the public-land States; and (3) what should be the conditions of recapture at the end of the term fixed in the proposed legislation.

Now, as I have stated, all of those questions have been fully discussed before the House committee. They were considered and, I believe, pretty well answered in the bill which comes from the House to the Senate. More than that, I think that all three questions are important, because they take a long look forward. They deal with the future, while at the same time providing for the present, in the way of development.

Senator WORKS. Doctor, I have gone over those hearings before the House committee, and they seemed to me to be quite unsatisfactory. I do not think they get at the root of these questions at all.

Mr. SMITH. I suppose if I could answer that with a question, Senator, do you not think those are the three questions that are the most important in the consideration of the bill?

Senator WORKS. Yes; I think they are most important.

Mr. SMITH. Those are the questions about which I purposed to speak.

First, with regard to the mandatory character of the legislation. I suppose a legislator has to decide between a general law, which leaves the details to be worked out by the administrative officers, and a detailed or special law, in which all of the details are set forth to fit each and every case.

I will agree with the committee or with the contention that the latter is the ideal; but I do not think it is practical, and what I say before the committee will be largely from some experience I have had these past few years as one of the advisers to the Secretary of the Interior in trying to secure development under a law that all of us have regarded as absolutely unsatisfactory. I am, of course, as you understand, not an administrative officer in those matters, but simply act as an adviser. Certain questions of fact are put up to the Geological Survey, and the engineers in the Survey answer those questions as best they can, on ascertaining the facts; and our reports are before the Secretary or before the Commissioner of the General Land Office at the time decisions are made in the administration of the land laws.

Senator SMOOT. That is only a question as to whether there is a water power there, is it not, that you pass upon?

Mr. SMITH. Not simply as to whether the water power is there, but we also go further and advise the rest of the department regarding the relative value of that water for power development, or for municipal uses or for irrigation uses. And there again is a case where we can not set up a very definite rule. We have to take each case by itself, and present all the surrounding circumstances.

Even more important, it seems to me, than the consideration of the fact that the circumstances so differ in different States and different parts of the country, is the fact that conditions are changing, not only with place, but also with time, and what was true a few years ago and may be true now, it is safe to say will not be true to-morrow or 25 years from now. It is therefore, I think, absolutely essential that we look forward and not backward. I think the trouble has been, judging from the hearings and discussion before the House committee, that too much attention was given simply to the past. Of course, we must learn something from the past.

Senator CLARK. And yet, Dr. Smith, there is very much of this in the future. There is something in the nature of speculation as to what may and what may not come, and ought we not to deal not so much with the past or the future—not to lose sight of the future, of course, and its possibilities—but deal more directly with the things of the present?

Mr. SMITH. I think sometimes, Senator, that the conservation view of development has been defective, in that too much emphasis has been put on the future. We can not save things for our children at too much expense to ourselves. But I think that in many cases we can absolutely coordinate the future uses with the present use.

Senator CLARK. My idea of the subject is that in all these matters we are confronted with things at the present time. Those are the things, in my opinion, which should be dealt with at the present time, and in such light as we may have at this time, and we should not postpone that action because we think, and, perhaps, know, that at some future time other and different conditions and remedies will arise, because an act of Congress which is passed to-day is not final, but we can at any time hereafter, as conditions arise, shape our legislation to meet those conditions and developments. That was my opinion in interrogating you.

Mr. SMITH. I think that I pretty well agree with you, Senator Clark; and one of the reasons why I feel that it is dangerous to make the legislation mandatory is that it may involve prohibitions that we may not want to see enforced even next year or the year after; and it is not going to be possible, optimistic as we may be, to get legislative relief speedily in every case to meet some detail.

When you speak of public-land laws, some of those, and most of the mineral-land laws, are either older than I am, or about as old as I am, and they are more out of date, I submit, than I am.

Senator CLARK. Well, you are quite up to date.

Mr. SMITH. Right there comes the difficulty in administration. We are trying over at the Department of the Interior to make outgrown laws fit conditions of to-day, and I think the attitude of the executive officer most of the time, if not all of the time, has been to strain to the limit in the construction of the law to fit the existing circumstances.

Senator WORKS. Well, we can change the law, of course, by amendments, but we are not going to be able to change any of the contracts that are made under the law we make now. If any leases are made they are fixed and determined as to the rights of the Government and of the lessee for 50 years to come. Therefore we ought to be very careful about what conditions we impose upon private individuals under that statute for that length of time. We are looking a long ways in the future in dealing with that question. You can not change a contract, but you may change the law.

Mr. SMITH. I think, Senator, that cuts both ways; that we have got to protect both the investor and the consumer in any contract that might be made.

Senator CLARK. I want to ask you this, as to the administrative question: You spoke of the antiquated laws in relation to our mineral. Is it not a fact that the application of those laws and their operation have been very considerably changed in the last 15 or 20 years by administrative action? In other words, is not the Department of the Interior now holding very differently under exactly the same law, the law never having been changed? Are they not now holding, as to the operation of that law, very differently than they did 15 or 20 years ago?

Mr. SMITH. Absolutely so. Take the case of the coal lands.

Senator CLARK. So that the decisions of the Interior Department 20 years ago and the decisions of the Interior Department to-day on the absolute meaning of the law as interpreted by the department are very different in the construction they put upon the law now from what they were then?

Mr. SMITH. I think some of the earlier constructions hardly could be considered as constructions. Take that case I have cited as to the coal-land law, where everything was sold at the minimum fixed in the law.

Senator CLARK. And yet it was decided for years and years, and decided by some of the courts, that the price fixed in the law at that time was a maximum price in fact?

Mr. SMITH. I did not know that the courts had so held.

Senator CLARK. Not only have the decisions of the department progressed in that way to meet these very conditions which you speak of, but they have progressed in other ways, as to the duties of

the entryman and as to what the epening of a coal mine means and everything of that sort. So that you are not, in the opinion of the administrative officers, as you seem to think, bound by any one construction of the law as it is written, but your administration progresses as you think the necessities of the case require, or as you get more light, perhaps, on the subject matter.

Mr. SMITH. But in many cases we come up against the stone wall of the limitation in the law. There have been constructions that some of use would like to see put on the mineral-land law.

Senator SMOOT. You have overcome such questions by withdrawals of some sort, have you not?

Mr. SMITH. Oh, no; we do not withdraw against metalliferous mineral entries; we can not under the law.

Senator SMOOT. But you were speaking of others.

Mr. SMITH. I speak now of the metalliferous lands.

Senator SMOOT. The laws or rules pertaining to metalliferous lands are entirely different now than they were five years ago. Take the question of discovery. It has entirely changed, and it seems to me that the department rules just exactly, in the case before them, as they see fit, and not as the law has been construed or what it was intended to be. I can call your attention, Doctor, to a number of cases, and I think that you will admit that in these cases they were absolute reversals of what had been the practice of the Government ever since the law was passed, and in these several cases there have been two or three rulings upon the same question.

Take the East Tintic claims, and take the claims in Arizona, as to the question of discover, for example; the department has absolutely held contrary to anything that was ever held before.

Mr. SMITH. Which ruling; the last one?

Senator SMOOT. Well, the last is a modified ruling. The original ruling that was made in the case I speak of, as first made, and I might say even the modification of the ruling is a modification of the law.

Mr. SMITH. I believe that, of course, not being a lawyer, I have no right to speak about such matters as the construction of the law, except I believe Secretary Lane told some of us one day that the construction of a law, in the first place, means use of common sense. But from a common-sense standpoint the trouble with the East Tintic and with the Rough Rider cases, to which you refer, has been that the law was written before we knew much, if anything, about the kind of deposit involved in those cases. Deposits that did not have surface indications sufficient to constitute a discovery were not contemplated in the law enacted back in 1872.

Senator SMOOT. If the department had always taken the same position we would not have had any mines in Utah. No mine in Tintic—and I suppose you have been there yourself——

Mr. SMITH (interposing). I spent a field season there.

Senator SMOOT (continuing). Was ever developed upon a surface discovery.

Mr. SMITH. The Mammoth discovery was made on the surface.

Senator SMOOT. And that is the only one in the district. Take the Grand Central, adjoining the Mammoth. Its officers spent over $200,000 before ever they saw a color of value.

Mr. SMITH. The claims that were taken up in the Tintic district, with the exception you mentioned, were taken up regardless of the law provided for the purpose of assisting in the development of mineral resources on the public lands.

Senator SMOOT. I would not want you to go quite that far, because in the case of every discovery and every claim in Tintic you could go upon the surface and get an assay. There is not a location on which you can not do that. But ore is not in place, and the ore in Tintic is seldon in place, with the exception of the old Mammoth location, the first one that was discovered in that district.

Mr. SMITH. And where the ore has been mined right from the grass roots?

Senator SMOOT. Right from the grass roots to 2,200 feet depth But that is the only one, and every other mine in Tintic is made up entirely of pockets of ore. There are no regular veins. You do not know when you are going to be out of ore or when you are going to be in ore in Tintic.

Mr. SMITH. I do not believe a better case can be cited than Senator Smoot has cited, showing the difficulties of operating under a law that was made before anyone knew enough to provide for just those cases; and it was only by default that claims were taken up in Tintic and pushed to patent, and where they made a very successful camp. But I feel that that fact should not be an excuse for the administrative officer to shut his eyes, in these enlightened days, to the plain requirements of the law. I have been advocating every since I have been Director of the Survey some improvement in the mineral law that would provide for just such cases, and more than that, that would afford a legal opportunity for a mining man to protect himself against blackmail from others coming in around his property.

Senator SMOOT. This decision went further than that. It went this far, that a mining company could have a body of ore right up to its end line, 1,100 feet deep, and that body of ore worked over into another claim. I do not say side lines. I say end lines. It was a physical possibility to see that the ore was there, but because of the fact that it was not discovered on the surface, it was not a discovery.

Mr. SMITH. And for that reason I have contended that we should have such a thing as geological discovery, or call it a mining discovery, making such a discovery a thousand feet below the surface as good evidence as the discovery at the surface, which discovery at the surface, however, is the only one recognized by existing law.

Senator CLARK. Dr. Smith, the purpose of my inquiry was this, that one of the reasons why I am personally desirous of writing as much into the law as possible, giving reasonable discretion, yet putting some limit upon the discretion of the administrative officer, is that as these conditions develop scientifically in your bureau and others it results in a gradual but continual and finally complete change of the rulings of the department as to what constitutes a compliance with the law, and the consequence is that too often the man is uninformed as to what the holdings of the department may be upon particular acts which he wishes to perform in order to secure his right. Now, a man perhaps goes upon a claim and he looks at the law; he wants to comply with the law in its terms; and he looks at the rules of the department, and he wants to comply with all of

them, and he does it, yet he comes right up against a decision where the Secretary, in his discretion, when his case comes before him, overturns what has gone before, and he is, as you say, up against a blind wall, and he does not know what to do. He has complied with the law as he interprets it, and complied with the law as it has been interpreted theretofore by the rulings of the department; yet when he comes to put his in, and it comes to the test, he finds he is lacking in something, and that lack seems to me to be a lack of being able to foretell what the discretion of the Secretary may be. There is the difficulty I find in this whole matter of giving large discretion—more than is necessary, perhaps—and that is the reason I favor writing into the law as much of the details as we possibly and properly can.

Mr. SMITH. In a law such as the one we are considering here I think that the practical solution is for the general principles to be fully set forth in the law—that is, for Congress to declare the policy—and then leave to the executive officer the making of such regulations as are necessary to put that very policy into effect.

Now, if we put in the law mandatory provisions—some of which have been mentioned and objected to, I think very properly in connection with this law—it is apt to work hardships in particular cases for the very fact that conditions vary between Nevada and Montana and they are bound to change in the course of time, and they are changing very rapidly, as so many of the witnesses already before you have stated. I should say that the formula, reduced to its lowest terms, is that we should put enough "shall" into the law to make it certain in action, which is the point that was made by Senator Clark, so as to invite capital to enter upon the development of these unused resources, but at the same time put enough "may" into the law to make the law just in its action, to protect the consumer, if you please. And if you strike the mean between what will invite capital and what will protect the consumer, I think that you will have a law that will be workable. And I want to say right here I believe this law, even in its present condition, would be workable. I try to put myself in the attitude not only of the consumer of electric power out there in some California or Montana town, but I try also to put myself in the attitude of the widow and orphan in Connecticut so often spoken of.

Senator NORRIS. Doctor, as I understand this discussion that has been going on, the Interior Department is going to be as bad as the courts in its tendency to vary the construction of laws and reverse itself occasionally?

Senator CLARK. Yes; but you do sometimes cite a former decision of the court, but you do not cite a former decision of the Interior Department.

Mr. SMITH. A part of the trouble may be that the lawyer in the Interior Department or the lawyer appearing before the Interior Department cites the courts to sustain the arguments there either the one way or the other.

Senator SMOOT. Speaking of protection to the consumer, do you not believe that the public-service commissions of the different States are now protecting the consumer?

Mr. SMITH. I think they are protecting the consumer more and more. What we need to-day is to get the Federal action to coordinate itself with the State action. When I say "government" at any time

here I do not want it understood that I am spelling it with a capital G, meaning simply the Federal Government. To me government means State government as much as it means Federal Government; and I think that public regulation means Federal regulations plus State regulation, or, the other way around, State regulation plus Federal regulation.

Senator WORKS. Do you not think there will be some conflict come from such an arrangement as that?

Mr. SMITH. I am not at all afraid of that, Senator. We are coming more and more to where we are working in absolute coordination to the State regulatory powers.

Senator WORKS. Suppose there was a conflict; what power would predominate?

Mr. SMITH. The same question was put to me when I was before the House committee, and I said that I hesitated to pronounce on that matter when it was before the Supreme Court; but if I had expressed my opinion I would have expressed it just as the Supreme Court did a few weeks later in the Shreveport case, that where there is a conflict of course the Federal Government must necessarily, for the benefit of the people, even, have the upper hand.

Senator CLARK. I do not think the court decided that.

Mr. SMITH. I think it did, that where the intrastate conflicted with the interstate the Federal Government had the larger jurisdiction.

Senator WORKS. Where the two really conflict?

Senator CLARK. But how about where there is a claim of conflict?

Mr. SMITH. The questions with me was where they really conflicted.

Senator WORKS. Where the State and National Governments both have jurisdiction that might be true; but the point here is that the Federal Government is undertaking to interfere where it has no jurisdiction at all, which is entirely another matter.

Mr. SMITH. I think, as provided here, that the Federal jurisdiction comes where there is no State body exercising jurisdiction, in the one case, and in the second case where it is an interstate problem, and where neither State body, even if it existed, could control.

Senator WORKS. That only applies under the language of the bill where it is a question of fixing rates. But the general control of the water in the streams and the right of the States to determine that matter, it seems to me, is impinged upon throughout this bill. That is the thing that is troubling me more than anything else. The very fact of imposing an additional charge upon the power to be supplied, which must be supplied under the rules and regulations of the State, is an infringement upon the State's rights at the very beginning of it.

Mr. SMITH. I see no practical basis for fear in that respect.

Senator WORKS. There may be no basis for fear, but I am talking about the fact.

Mr. SMITH. Take the case of California, in which the granting of water rights is very well controlled under a State board. As it happens that State board is in very active cooperation with the Federal Geological Survey.

Senator WORKS. Take, then, that situation: The State authorities have a right to grant what we call a water right, to begin with. Necessarily that is a water right to be controlled by the regulatory body of the State. That is what the right is. But you are propos-

ing now to step in and impose an additional burden not contemplated when the water right is taken up and not within the rights of the National Government at all, it seems to me.

Mr. SMITH. And yet, in that very connection, the California Board of Water Control—they change the name of the board from time to time—is sending duplicate records of all its water rights and the papers connected with the case to the survey for us to examine and keep on record, and, on the other hand, if there is an application which involves the use of water we send our papers to the State board and ask for their advice in the matter.

Senator WORKS. Well, I am not talking about cooperation.

Mr. SMITH. So that there is in that particular case—and the tendency in Oregon is much the same way—an active and perfect coordination between the Federal and State authorities.

Senator WORKS. That may be. You may be working in perfect harmony now, and you may both of you be working against the interests of the individual consumer—the man who holds the water. I do not know how that may be, but I am talking about the law of it.

Mr. SMITH. I suppose I look upon the law as a means rather than an end in these matters; and it is so as to secure the right kind of action in the future that I think that the effort is being made here to legislate in this case so as to remove uncertainty.

Senator STERLING. Do you think the Federal Government has a right to make a charge for anything more than the use of land—rental for the land?

Mr. SMITH. If I said, Senator Sterling, that I did or that I did not, of course the difficulty would be to determine what is the fair value for the use of the land, and I think that is a question on which any two people would naturally disagree. For instance, I think that land on the Sierra Nevada, the east front of the Sierra Nevada, has a water-power value that is altogether different from land 20 miles farther east, out in the center of some desert valley.

Senator STERLING. If there is a charge by the Federal Government, do you not think it should be a charge for the use of the land and not a charge for the water power developed?

Mr. SMITH. It should be a charge in some degree based upon the use of the land. And when I say value I might just as well say use, because the two go together—the use of the land for water-power development purposes. One dollar and twenty-five cents an acre for land to be used in water-power development is, of course, absurd. But I want to add to that that I do not care anything about this charge for the use of the Federal land as compared with the using of that land in the interest of the general public.

Senator CLARK. Is not the difficulty that concerns some of us who are very much interested in this more that we consider that this is a charge upon the water which belongs to the State, and the use of the water which belongs to an individual under an appropriation from the State, and not a charge upon the land; and is not that idea borne out by the fact that if there are two places capable of developing a water-power site, one upon Government land, immediately in proximity to the stream, and another 5 or 6 miles away from the stream, and it is the desire of the promoter of the enterprise to put his works at a point 5 or 6 miles away from the stream? Now, is there not just

as much charge, and is not the proposition of withdrawing these water-power sites to put just as much a charge upon that water, whether the power is developed upon the land of the Government, or whether there is simply a ditch or pipe line run through the land of the Government onto the private land where the power really is to be developed?

Mr. SMITH. All of that matter, I think, is largely unsettled under present conditions. We have not a law that we can really base much upon.

Senator CLARK. I know, but this land is withdrawn for the purpose of power sites.

Mr. SMITH. Yes.

Senator CLARK. Now, as a promoter I do not care to put my power site upon that particular land, but that land is necessary for me to use as a right of way in order to conduct the water from the stream to the place where I want to put my plant. I think it is safe to say that I would meet with the same consideration exactly under those circumstances that I would meet with if I were to put my power plant upon your Government land, immediately adjacent to the stream.

Mr. SMITH. Senator, I could not answer whether you would or whether you would not. I am perfectly willing to answer that I do not think that you should pay the same for a small use of Government land as you would have to pay for a large use of Government land.

Senator CLARK. So far as the use of the land is concerned it amounts to the same thing, because the land itself is absolutely without value except for that purpose. But if you use it, it makes no difference to the Government, so far as the value is concerned, whether you use it to put a pipe line on or whether you use it to put a power plant on.

Mr. SMITH. I have a house here standing on land that is absolutely of no value except for the purposes of that house, and yet it has a taxable value that is larger, of course, than anyone likes to pay taxes on.

Senator WORKS. Doctor, suppose the Government should impose this burden upon the lessee and he should fail to pay the amount provided for. I suppose then the Government could forfeit the lease for nonpayment of rent. Then what would become of the beneficial use to which the water had been applied under the laws of the State? You would absolutely terminate it, would you not?

Mr. SMITH. I do not think it would be necessarily terminated simply by failure of the party or the company to use that water or use that one site.

Senator WORKS. This one company has control of that particular site, and has appropriated the water under the State law and for power purposes, to put it to a beneficial use, and the Government has a right to forfeit it and absolutely put an end to the use of that water, at least for the present.

Mr. SMITH. I do not think for a moment that the Government would stop the operation of a power plant without providing for its operation under some other agency, because that would be a hardship, as you suggest.

Senator WORKS. I know, Doctor, but it could do it under this statute, if we enact it. You see that? That would be true, would it not?

Mr. SMITH. Yes; but let me answer that, Senator, I think that the power company could stop operation. If it is a corporation it could do a lot of things, you might say, but it will not. We are all of us human, and are working for the best interests, not only of other people, but especially of ourselves. Furthermore, the Government would not deprive the citizens of a town in California of the current that lighted their homes.

Senator WORKS. I do not think the corporation could put an end to it without being liable for the consequences, but there would be no liability on the part of the Government if it should put an end to it.

Mr. SMITH. But would the corporation put an end to it in this way, by refusing to pay a little insignificant tax? It would be against their own interests.

Senator WORKS. I know the corporation would not do it for that purpose, but the Government might declare the lease forfeited for nonpayment of the charges.

Mr. SMITH. That was the premise.

Senator WORKS. A corporation supplying water, either for irrigation or power, can be compelled by the courts to carry on its work. You can not just simply abandon it. But under this bill it can be compelled to stop the power or stop the flow of water.

Mr. SMITH. I do not think for a moment that the Government would fail to protect its own people.

Senator WORKS. You are talking about what the Government may do. I am talking about what it can do under this legislation.

Mr. SMITH. I do not look upon the Government as apart from the people.

Senator NORRIS. You could compel a corporation, in that instance, to pay that tax, if it is necessary to go on.

Senator WORKS. I suppose a corporation would be liable in an action to recover the amount, but there is no way you can enforce it to go ahead.

Senator NORRIS. You were speaking of a case where the Government could cancel the lease because the corporation did not pay the tax, as I understand it. In the event the corporation might not see fit to pay the tax and go ahead, would that not be one of the instances over which the court would have jurisdiction, and could it not say to the corporation "Go ahead with this proposition and keep it up, not only pay the laborers, not only pay what the State exacts of you, but pay the Federal Government its tax."

Senator WORKS. I do not know of any way that the courts could deal with that in that summary way.

Senator NORRIS. They could just as well, I should think, force them to pay that tax as any other.

Mr. SMITH. Section 12 provides:

That any such lease may be forfeited and canceled by appropriate proceedings in a court of competent jurisdiction whenever the lessee, after reasonable notice in writing, as prescribed in the lease, shall fail to comply with the terms of this act or with such conditions not inconsistent herewith as may be specifically cited in the lease.

In other words, the premise proposed by Senator Works involves a corporation doing something that I do not think it would think of doing, and then it involves the Federal Government afterwards doing something here in Washington that I can not conceive of their doing, and then it involves, before any stoppage of the wheels take place, a court doing something that I can not conceive of a court doing. I think the operation of that plant is protected by section 12—the continuous operation.

Senator WORKS. Then that provision authorizing the forfeiture of the lease for nonpayment ought to be stricken out of the bill.

Mr. SMITH. Is not this the provision?

Senator WORKS. That is the provision that authorizes the forfeiture of the lease.

Mr. SMITH. After appropriate proceedings in a court of competent jurisdiction.

Senator WORKS. Why, certainly.

Senator SMOOT. Has it not been the policy of the department in the last five or six years to prevent the development of waterpowers that are compelled to pass through no matter how small a part of the public domain in doing so, unless they comply with the desires of the department as to the permit, etc.?

Mr. SMITH. I think that the policy has been to prevent their disregarding the public interest, and the method has been to have them take out such permits as in the opinion of the officers charged with the execution of these laws already on the statute books would bring that about.

Senator SMOOT. I ask the question because I know of a power plant developed entirely upon private land, and the right of way was supposed to be entirely upon private land or State land, and the land records so showed. But a quarter section that they had to pass through ultimately turned out to be Government land. It was supposed to be State land through some selection by the State. As soon as the company found that out they put scrip on it, under the law, and as soon as they scripped the land the Government immediately held that they could not scrip it and withdrew the land after the scrip had been placed upon it.

Now, that is rather a stretching of all the former decisions of the department. They held that by scripping of the land they had no right to the land until the patent had finally been issued, and it could be withdrawn, no matter if it had been scripped.

Mr. SMITH. I believe, so far as I know of any particular case, that that may have been exactly what was done. But I think, as was brought out and as is sustained by the opinion of the Secretary of the Interior, the Government has the right to do that in the execution of laws already on the statute books, including the withdrawal act, and it does not provide for rights obtained through the filing of scrip. The purpose of that was not to stop development, and I think that all of our efforts have been along the line of promoting development.

Senator CLARK. What was the effect of it, Dr. Smith? I am not familiar with it.

Mr. SMITH. I do not know the particular case that is referred to.

Senator SMOOT. Of course the pipe line was built clear through the land before they discovered that it was Government land.

Senator WORKS. What was the result?

Mr. SMITH. Are the wheels not turning just the same?

Senator SMOOT. I think so. But, of course, the result will be that they will have to take out a permit or else go into court, I suppose.

Mr. SMITH. I do not know of any case where development already initiated has been blocked. There are a number of cases, and there have been some witnesses who have made statements here that such and such a plant was altogether, or with the exception of 26 acres, as Mr. Britton said, on private land. As a matter of fact, in many of those cases there are lands that are in controversy, the Government claiming that the power company is in trespass, so that there are some different matters that are under consideration; but the wheels are going around just the same.

Senator SMOOT. Of course you ought to say that many of them are now in court and others will be in the Supreme Court before long for final decision. The Government is not stopping them while the decision is pending.

Mr. SMITH. Of course there are other cases where plants have been constructed without regard to whether it is on patented or unpatented land, and no applications, even, have been taken out for the lands.

I could cite many cases where we are having practical difficulty in determining equities for the use of the waters; that is, whether the water should be used for irrigation or whether it should be used for power. The principal trouble comes, however, where the statement is very definitely made that it is to be used for irrigation when, as a matter of fact, it is to be used for power.

Senator CLARK. Well, now, right there, Dr. Smith, most of our Western States have statute laws upon the classification of the use. They give preference use. When the State has once passed upon and has given a permit, for instance, as you say, for the use of water for irrigation purposes, and has allowed the water to be appropriated for irrigation purposes, bearing in mind that it refers only to the use of the water and not to the use of the power site or anything of that sort, but refers only to the use of the water, the State authorities, under the State law, having determined that, as they have a right to do, do you think that the Government ought to go behind that permit and decide that the State was wrong in granting that permit for irrigation purposes?

Mr. SMITH. I think we would get further, possibly, Senator, by considering special cases.

Take one of the cases on Kern River, where a right was granted to a company for water, and they put up the claim that they wished to build a dam for the storage of that water for irrigation only. They were granted an easement under the act of 1891. Never one drop of water from that dam ever was put to an irrigation use.

Senator WORKS. What company was that, Doctor?

Mr. SMITH. Mr. Short tells me that when they applied for this irrigation right, for the irrigation use of the land, the application showed transmission lines. Of that I am not aware, except as just being told me.

Senator WORKS. What company was that, Doctor?

Mr. SHORT. That was the Pacific Light & Power Co.

Mr. SMITH. And they could not put that water to an irrigation use, as they set forth in their application, for the reason that it had no right to use water on account of prior appropriations.

Now, there is a case where I think if more attention had been given to ascertaining the facts in the case, the executive officer, or administrative officer, would not have had any right to grant the public land under the law of 1891 for irrigation use, when, as a matter of fact, it was to be devoted solely to power use. Otherwise why have the 1901 law, which is for the purpose of power development?

Senator SMOOT. Take this case I mentioned in my State when the department would not allow the water to be used in our State for irrigation purposes. The parties wanted to use the water for irrigation purposes solely, but because they had to secure a little reservoir in a little bit of a stream that was as dry as a bone for eight years, where there was no possibility of developing power, because there was no power to be developed, they had to suspend the development of those two companies.

Mr. SMITH. What case was that?

Senator SMOOT. That is one of the little streams in the southeastern part of the State.

Mr. SMITH. I am not familiar with the case. There is a case something like that in Colorado or Utah.

Senator SMOOT. This is in Utah.

Mr. SMITH. Was it in connection with the Carey Act?

Senator SMOOT. No.

Mr. SMITH. I have not the case in mind.

Senator SMOOT. There was so little water that they intended to carry in pipes, not only from the creek itself, where the water was to be taken from the reservoir, but they were to pipe it and let out the water at the trees, there was so little of it. But on account of the fall of the water the department claimed it was a power site, so that we have neither the power site nor fruit farms there now.

Mr. SMITH. If that is a case that has come before the Geological Survey, I am surprised, because we, like the States, consider that, other things being equal, the irrigation use is the higher use.

Senator THOMAS. There is just the trouble, Dr. Smith.

These controversies come up, and they have to be passed upon by the Reclamation Service, the Geological Survey, the War Department, and the State Department, and it seems to me that is one of the serious, if not the most serious, of all these difficult things. We never know where to go with a case when we get started.

Senator SMOOT. And in most cases you will die of old age before you get a decision.

Senator THOMAS. Our grandchildren are apt to be grandsires before we get anywhere with it.

Senator WORKS. I suppose the Government might refuse to grant a permit, but so far as the actual use of the water is concerned, that is a matter to be determined by the States ultimately.

Mr. SMITH. And it had been decided by the State before the grant was made to the company.

Senator WORKS. Well, then, I do not see why that case is cited as illustrating your views on the subject, because there the State had

determined that use of the water, and had the jurisdiction to determine it.

Mr. SMITH. And the grant should not have been made, in my opinion, for power development, in view of the fact that the State had decided.

Mr. Short's statement to me now is that the suits were brought after the easements had been secured for the power developed, as an irrigation development. My understanding was that the water had already been adjudicated by court order before, but——

Senator WORKS (interposing). In that case, if the Government can issue a permit on condition that the water is to be used for specific purposes, it comes directly in conflict with the rights of the States to control the use of water for one purpose or another.

Mr. SMITH. I would submit, Senator, that the administrative officers are not in conflict; it is the law that is in conflict.

Senator WORKS. That is it. The administrative officers of the State and National Governments may be in perfect harmony and intend to violate the law, but that does not alter the situation.

Mr. SMITH. A case that might be mentioned here is the case that Senator Smoot also brought up yesterday, I believe—the prevention of the electrification of the Denver & Rio Grande Railroad by the use of the Green River Dam site. As a matter of fact, the Senator's statement is almost exactly in accord with the reports that have been made on this matter by the Geological Survey to the Secretary of the Interior, namely, that the purpose of that application for that dam site was primarily for power purposes. The contention of the applicant company—I should say through their representatives here in Washington, those making the representations before the department—was that it was for irrigation. Now, as a matter of fact, they went further and said that any power that might be possibly developed there in addition to the irrigation use would be a small matter, some 7,000 horsepower, and would be used as subsidiary to irrigation. Now, the contention of the Survey—and it is fully confirmed, I believe, by Senator Smoot's statement—is that the irrigation use would be subsidiary to the power company.

Senator SMOOT. Doctor, let me explain the situation exactly as I understand and see if you understand it the same.

Mr. Searle lived in my home town and I got it direct from him, and also from others.

Green River, Utah, as you know, runs through a valley that is very flat, and a valley where the land needs the water. This project was started by Mr. Searle and his associates with a view to building a dam to store water to irrigate enough land in the valley to justify the expenditure of the amount of money required for the building of the dam. After a thorough examination they concluded that it would not justify the expensive work for the amount of land that could be covered. Then the proposition was made to them by a power company, who intended to electrify the Denver & Rio Grande Railroad from Salt Lake City to Denver. The project was only to electrify the road from Salt Lake to Grand Junction, and power generated in Colorado would carry it from Grand Junction to Denver. The power company had a thorough examination made of the plan. They found that there was sufficient water and that by raising the dam a great deal higher than anticipated in the first place they could

create enough power to electrify the Denver & Rio Grande Railroad. The power people proposed to the people who made the location for irrigation purposes only, "If you will give us the power, we will build the dam for you without a cent of cost to you, and you can use the water after it leaves our wheel for irrigation purposes." Now, that is how the power question was involved in this proposition, and it has been held up, and neither the lands have been irrigated nor the road electrified. The land and road remain exactly as they were. Mr. Searle is now dead, and I do not know whether his associates ever intend to go on with the proposition or not.

Mr. SMITH. The point was made at the last formal statement before the department, and I quote from that statement, "Under a reasonable interpretation of the phrase 'as subsidiary to the main purpose of irrigation,' this valley under irrigation will easily consume the said 7,000 commercial horsepower for such subsidiary purposes." And, informally, at the survey the representatives of this company simply poohed-poohed the idea of any of that power ever being used for the electrification of the railroad; and the point I wish to make is that this statement that they made in trying to get the grant under the 1891 law was not borne out by the facts in these cases.

Senator SMOOT. Mr. Searle was one of the most honorable men in this country, and I believe his statement to be absolutely true, wherein he says that in the beginning they had no idea of developing power. They did pooh-pooh it.

The CHAIRMAN. That was this year?

Senator SMOOT. And I want to ask you if this later statement was ever made in relation to the power—or I will ask the question of Mr. Mitchell: I want to find out when the question of power first came up. Mr. Mitchell, do you remember when the question of power first came up in relation to the Green River project?

Mr. MITCHELL. About two or three years ago. An engineer in New York—his name was C. G. Young—said to me: "You gentlemen are figuring on some power at the present time in Utah; and you are also interested to a small extent in Colorado; and I know that you are figuring on an extensive power development in that section; and I want to bring to your attention the matter of getting a power site between Salt Lake and Grand Junction, which can be used to very great advantage in connection with the negotiations which I know you have in mind with the Denver & Rio Grande for electrification; and furthermore you might be able to use power to very great advantage anyway at that end of your system. Your large power is farther north, on the Bear River."

After further investigation, in a preliminary way, we said that the site would interest us if the power could be cheaply developed and we could get good title.

The result was that Mr. Searles came around to see us. He represented to us that there was a wonderful power at about the location of the Desolation Canyon, in Green River, but that, in order to make it useful, it would be necessary to build a very high dam and large reservoir, which would make it exceedingly expensive.

He told me that he had for years been working on this project with Gen. Wedgwood and a man named Simpson and some other men in Colorado—I do not remember the names of the others; they live in Denver. Mr. Simpson is the only one of the Colorado people

that I remember, but if my memory serves me right I think some of the others were the Causey-Foster interests in Denver, and I do not remember the others that were interested there with them.

They said to us that they would like to make a deal with us in order to reduce a part of the expense; they had a plan to irrigate something like 200,000 acres under the Carey Act, as I remember it, down on the Green River; and that they wanted power to pump the water to levels above their ditches as well as to irrigate the valleys down below. They also wanted power down there, they said, to light the homes of the settlers and do the cooking, and otherwise make that a good place to live. But the deal that they wanted was that the water should first be used for irrigation; any power beyond that was to be used for that district for taking care of the project people, and the surplus power above that we could have if we would build the dam.

I told the gentlemen that was all right provided we could get title. Mr. Searles and Mr. Young both said that there was no question about the title; that they could get it, and they thought they would be able—so they told me—to get this land restored to entry, so that it might be scripped, and in that way they could get title which we would accept.

Mr. Simpson came on—I could not tell you exactly when that was, but I should judge two years ago—and then Gen. Wedgwood assured us that the title was all right; and every argument under the sun that could be advanced they used to convince us that the title was all right; and they also stated, among other things, that the contemporaneous construction of the act of 1891, I think it was, was that it applied to power as well as to irrigation, and that it was not necessary to get revocable title under the act of 1901.

Well, we told them that we had been practiced on a number of times in similar cases, or, at any rate, in a good many cases, where the department has held to the contrary, and we were not going knowingly into buying a lawsuit; and I said, "If you get the thing straight, we will be glad to make a deal with you—so as to get a straight title; otherwise we are not interested in it." Now, whether they gave up after that any idea of getting incidental power and went back to their original scheme for irrigation only, I have no information, except what Dr. Smith has told me. All I know of my own knowledge is what I have told you.

Senator SMOOT. What I want to know, Mr. Mitchell, is about the time the question of power came into this project? My opinion is that it could not have been more than three years ago.

Mr. MITCHELL. About two years ago, I think, was the last time they spoke to me about it; and when they came back and said they could not get the title, I dropped the matter. I have information that they had negotiations with other people, but they could get nobody to go in, because it was too expensive. In fact, I sent them to some people myself.

In that connection it might interest you to learn that that power was intended to be used on the railroad, if taken up, because we had negotiations at that time with the Denver & Rio Grande Railroad; and it looked very favorable at one time; they were anxious to do it, because they wanted power developed along the Green River; they were anxious to have electricity there so as to develop

the lands all along the line of the railroad to Grand Junction; there is practically nothing at all to-day between Green River and the junction; and they wanted to put those lands under cultivation.

Mr. SMITH. The point I wanted to make as to the Green River power site is that up to the time Mr. Mitchell made the statement to me during these hearings, and yesterday when Senator Smoot made a similar statement, there has not only been no mention of the electrification of the railroads in connection with this project, but there has been denial of it; and even in the latest statement made only this last spring by the company, which was the one I quoted from, it was stated that this surplus power would be used simply in connection with the domestic and other requirements for power in connection with the irrigated area. That is simply one of those cases where the argument put up to the developers of power and the argument put up to the department are not at all of the same character.

Mr. FINNEY. May I say a word here, Mr. Chairman?

The CHAIRMAN. Certainly.

Mr. FINNEY. I have had something to do with that project, and I know Mr. Simpson and Gen. Wedgwood very well, and I think highly of them, and I think they have been very frank and very plain in their statements to me. The circumstances were virtually these:

In addition to the water that would be available for irrigation in the Green River Valley, there is required to go down the river 1,600 cubic feet per second. That is water that can not be used there, because it must go farther down for the Government irrigation project in Arizona and California, and for the Imperial Valley irrigation projects, and for others along the lower river.

Now, that water must go down continually, and can not be used there for irrigation. It would, of course, be available for power development, as the water would pass over the dam and go down to those projects below. In addition, a large part of the water stored in the reservoir would be available for irrigation during the summer months; and during the remainder of the year that would be available, of course for power generation. Mr. Simpson stated very frankly that he could not afford to build the dam for irrigation alone.

Mr. MITCHELL. That is what he said to me.

Senator SMOOT. That is what Mr. Searles told me.

Mr. FINNEY. And we tried to work out some plan whereby there would be a separation of the grants, so that we could grant a permanent easement where it was to be used for irrigation, and a temporary permit under the act of 1901, for power development; but we have not yet reached any solution because the dam itself is a combination structure; it stores water for irrigation use in the summer, and it also creates the head that makes the power. I do not know whether they have dropped the scheme or whether it is still pending.

Senator SMOOT. Mr. Searles is dead now; and I do not know whether his partners are going on with it or not. I have not heard from Gen. Wedgwood since Mr. Searles's death, in relation to the project.

Mr. FINNEY. Mr. Simpson was here four or five months ago.

Senator SMOOT. Yes.

Mr. FINNEY. And I asked him if he thought they could build the project if they had a 50-year permit under this act, and his answer indicated that he thought they could.

The CHAIRMAN. Let me ask you about that 1,600 feet of water, which you say was to subserve irrigation purposes below; how far below the point where this proposed dam was to be made will that 1,600 second-feet of water be available?

Mr. FINNEY. Several hundred miles.

Mr. SMITH. Is not some of it right there in Colorado and Utah?

Senator WORKS. Some of it is down near the Pacific coast.

Mr. FINNEY. There is no place where they can take it out until it gets through the Grand Canyon; it is used in Arizona and southern California, and the Imperial Valley, you know, is in the extreme southern part of California, the canal going down into Mexican territory and coming back into California.

The CHAIRMAN. Can you give me the amount of water that would be lost by the process of evaporation, from the point where it is unavailable to the point where it is available?

Mr. FINNEY. No, sir: I could not tell you that.

Mr. MITCHELL. I would like to make just one other statement. I would like to say that Mr. Finney's statement is exactly in accord with the facts, as I understand them; here was a dam that would cost something over $2,000,000. We were willing to aid a project under the Carey Act if we could get the land on which the power house was located and the perpetual use of the waste or surplus water, which was something better than was possible under the law as stated, unless the land was restored to entry. A good deal of the winter water went to waste because the reservoirs could not hold it; and the idea was simply to use the water which could not be used at any time under this Carey Act project; and, in consideration of allowing us to use the water which could not possibly be used by the Carey project, we would build a dam costing over $2,000,000 and give it to the irrigation district. We did not want title to the dam, but we did want permanency in its use, and also title to the property on which our power house would stand.

Mr. SMITH. Of course the statement which I wished to make was the one which was submitted to the department, the concluding paragraph of which I read, and is in opposition, I believe still, to the representations made to Mr. Mitchell, namely, there was 7,000 commercial horsepower available for outside uses; because the statement was that this valley, under irrigation, might easily consume 7,000 horsepower for subsidiary uses.

Senator SMOOT. Well, you do not understand that the electrification of the railroad was to receive its electricity entirely from this project, do you? They were going to use the Utah Power & Light power.

Mr. SMITH. This was to go into that.

Senator SMOOT. Yes; this was to be a part of it.

Mr. MITCHELL. It was to be a part of it, and some Colorado power was to come in from the other end, and also from Provo, on the Salt Lake end. Besides, in the wintertime there was a very large amount of power which could not possibly be used for irrigation and was absolutely wasted, and it was this winter power especially that was wanted in our power system; and in the wintertime, according to our

estimate, it is very much in excess of this 7,000 horsepower; and the important point is, it came in just where it was wanted, there was no power that was available between the Colorado power and the Utah power over to the west of the Wasatch Range.

Mr. SMITH. Of course this is one of the many cases in which representations are made to the department upon which the department is asked to make its decision in administering the law, that are quite different from those that are either known by engineers or are made by the applicant companies to their investors, or their intended investors. A similar case which I cited before the House committee—and I do not know that it is necessary to take up here—was that of Crane Falls; another case is that of the Hillside Water Co. in California.

Senator CLARK. May I ask you a question? Here is a practical proposition. I know nothing about this particular place, but I gather that here was a possibility for an irrigation project that would give 7,000 horsepower?

Mr. SMITH. Seven thousand horsepower; that is the surplus.

Senator CLARK. In irrigation?

Mr. SMITH. Above irrigation; above the needs of pumping for irrigation.

Senator CLARK. Well, it would give 7,000 horsepower, or 25,000 horsepower, no matter what the amount is; here a dam might be built primarily for irrigation purposes. At certain seasons of the year, when that water was not desired for irrigation, it was possible to store in that dam a supply for power purposes. Now, what harm could come to anybody if that irrigation project should extend itself so as to take care of a higher dam and use water that nobody could use for irigation for power purposes?

Mr. SMITH. Absolutely no harm, but quite to the contrary that should be encouraged; it should be encouraged under the law, and I think the law, after it is perfected, will provide for just such double use of the water, so far as it is possible. The point is now that the 1901 law is so inadequate that, for the sake of permanency of investment, which appeals very properly to Mr. Mitchell, or to anyone else to whom these applicants would take their project. It is necessary for them to come, in some cases, under the guise of irrigation in order to get an easement. I think development should be encouraged.

Senator CLARK. Well, you do not get my notion yet. Suppose you and I were interested in an irrigation project, and it required an expenditure of a large amount of money.

Mr. SMITH. Yes, sir.

Senator CLARK. And the department was perfectly willing that we should dam a river for the purpose of diverting that water, either by pumping or otherwise, on to the irrigated land.

Now, suppose we do that. The department gives us the power site; the department gives us all the privileges connected with it that the Government can bestow. Now, we go ahead, and say that by raising that dam 25 feet higher we could take more water, which otherwise would run to waste and benefit no man on earth, and by that additional expenditure added to the cost of our irrigation plant, we can create a power which would be of tremendous advantage.

Mr. SMITH. I think that should be done.

Senator CLARK. Why should not the law be so fixed that that power could be availed of without any other charge upon it and without any red tape applied to it—simply to make a beneficial use of that water that otherwise runs to waste that is of no value either to the Government or anybody else; why should not we be allowed in the case I have put to go ahead and build that dam higher without any fuss or feathers or red tape or anything of the kind?

Mr. SMITH. I think the fuss and feathers and the red tape are not necessary and are not defensible if we are considering a little bit of income to the Federal Government or to a State government. I do think that restrictions are defensible if they are for the purpose of controlling the public utilities in the interest of the consumer and of the investor.

Senator CLARK. Well, of course, that theory or that view assumes that the State will not control.

Mr. SMITH. Not necessarily.

Senator CLARK. I suppose you will agree that, so far as interstate commerce in electricity is concerned, it is, like the commerce of other things, subject to control by the Federal Government. But here is a situation: If the irrigation people build that dam for irrigation purposes only, I assume that the physical conditions are such that no other dam could be constructed there for power purposes; in other words, that the particular place where this dam is located for irrigation purposes would be the only place where a dam could be constructed to be of any particular practical value.

Now, if the irrigation people have it for irrigation alone, it exhausts the possibilities of the stream at that point?

Mr. SMITH. Yes.

Senator CLARK. The Government would have no control otherwise. Now, by simply adding to the height of the dam you create a resource there that otherwise never would be created, or never would be available.

Senator NORRIS. Senator Clark, you will concede in the case that you have put, will you not, that some power—without going into the question now of what power—ought to be able to regulate not only the charges but the service of the hydroelectric energy that is developed in the project?

Senator CLARK. I assume that power does exist.

Senator NORRIS. Yes; the only dispute is as to how that shall be controlled and who shall control it.

Senator CLARK. No; I do not think there is any dispute there.

Senator NORRIS. I think we are all agreed that there should be some regulation; that there should be some body somewhere which could prevent any exorbitant price that the company might desire to charge.

Senator CLARK. I hope we are all agreed as to this proposition—I do not know whether we are or not, but I hope that we are—that as to matters purely intrastate the Government has no power to control, but that those matters fall within the authority of the States, and that as to interstate matters they come under the commerce clause of the Constitution. Now, some people do not agree to that, but I do, absolutely.

Senator NORRIS. Well, assuming that, and granting for the purpose of argument that the statement is correct, then if this power that was developed in this addition to the dam of which you speak was used in interstate commerce it would come under the control of Congress?

Senator CLARK. Yes; that is my view.

Senator NORRIS. And ought to be controlled by Congress?

Senator CLARK. That is my view, exactly.

Senator NORRIS. Now, according to the statement of Dr. Smith, if they had the authority in the Interior Department they would attempt to exercise it.

Senator CLARK. Well, they have that power and are declining to exercise it.

Senator NORRIS. No; as I understand, the difficulty is that if you build the dam for irrigation purposes it comes under one law, and if you build it for power purposes it comes under another law.

The CHAIRMAN. Will you continue your statement, Dr. Smith?

Senator WORKS. Before we leave this subject, Mr. Chairman, I would like to suggest one point.

It seems to me that under this bill the conditions will be even worse than that; if the Government grants a lease under the provisions of this bill it must be exclusively for power purposes.

Now, there may be but one available site on a stream; and if you grant the lease exclusively for power purposes what becomes of the irrigation and the use of the water for that purpose? I suggested that in the beginning of these hearings.

Senator NORRIS. I think that is a very important suggestion.

Mr. SMITH. I think the measure goes part of the way toward providing for a double use, but I do not think it goes far enough.

Senator WORKS. I had not discovered that it went any distance in that direction. This is an authorization of a grant for power purposes only. That is the title of the bill, and that is the effect of it, I think.

Senator NORRIS. I would like to know whether you have any suggestions, Dr. Smith, that would meet the point suggested by Senator Works, and that is touched upon in the illustration that has been the subject of discussion between you and Senator Clark?

Mr. SMITH. I think possibly Mr. Finney has some amendment to suggest, and they considered an amendment of that nature toward the very last of the consideration of this bill before the House committee, and I think it was the press of time more than anything else that caused those provisions to go in exactly as they are. It was the desire of the House committee to try to interlock the two uses so as to permit adding to the dam, just as Senator Clark suggested. That is what we all want.

Senator WORKS. There are some cases where the erection of a dam for power purposes has made it more useful for irrigation after the water has been used for power purposes; the dam regulates the flow of the water at a point where that is most needed.

There are other cases where a dam erected for irrigation purposes necessarily gives water for power purposes. That ought to be covered if we could put it into the bill.

Senator WORKS. Certainly.

Mr. SMITH. Of course, the engineers will tell you that all of the water is not available for double use in most cases.

Senator WORKS. Yes.

Senator NORRIS. That is true.

Mr. SMITH. Unless you were fortunate enough to have a reservoir site below the point where the dam is located. And without exception it has been the effort of the department to encourage, so far as possible, that double use.

Senator WORKS. But this bill absolutely deprives the department of any such authority or power.

Mr. SMITH. I know that the bill ought to be strengthened in that respect; and I think the committee can improve it in that respect. I cited some of the cases that I remembered in the hearings before the House committee, or in discussions with members of that committee, as proving that we wanted something that would provide for both uses.

I mentioned a moment ago the Hillside Reservoir Co.—an applicant which is still before the department, I might say—asking for irrigation rights on the east front of the Sierra Nevada. Now, that case may interest some of you gentlemen. The company is incorporated in your State, Senator Clark—Wyoming; its principal place of business is in Colorado, Senator Thomas's State; it has a generating plant in California, Senator Works's State; and if Senator Pittman were here, I could tell him that they sold the power over in his State, Nevada.

Now, that case was interesting to me, because in a rate hearing before the Nevada commission they put in, as one of the elements in the valuation of their property, the water rights which they had at this Hillside Reservoir, a right which they tried to get under the irrigation law of 1891, and which the department suggested should more properly go under the act of 1901, the company contending that the irrigation was the only use. The reason that did not appeal to us as the only use was that the reservoir was high up on the mountain side rather than down in the valley near the land, where the irrigation was purported to be put into effect.

At the same time they were making those representations before the department, and making them with a good deal of vehemence, I happened to know they were making offers for the sale of not a part, as in this case of the Green River project, or, you might say, a subordinate part of the power, but for all of the power to be developed there.

Now, we think that there should be some regulation, some opportunity for regulation, written into the law which you are passing, for the purpose of development.

Senator SMOOT. Well, did not the public-utilities commission of Nevada have the right to reject the valuation of the power plant, and don't you think they would have rejected the one referred to?

Mr. SMITH. Yes and no. As a matter of fact, one of the commissioners, who wrote the decision, made a very strong argument against not only this water right, but their other water rights, some of which were on private lands; he rejected any intangible element in those water rights, and did not allow them to charge for any earning on that part of the valuation in Nevada. However, the two other members of the commission—and it seemed to be a case where the mi-

nority outnumbered the majority—objected to that, and thought that the water rights should go in at the full valuation.

Senator SMOOT. Not at the valuation; at the cost to them; whatever they had paid, or the cost to them of obtaining it.

Senator CLARK. May I ask you a question now?

Mr. SMITH. May I finish what I was going to say?

Senator CLARK. Certainly.

Mr. SMITH. I was going to say that this difference among the members of the commission did not affect the determination of the rate, because the rate was so large that it could take up any slack; in other words, I might just as well mention that the rate which was allowed on the valuation by the commission was something over 17 per cent. That is the case of the Nevada-California Co.

Senator SMOOT. And in that connection we ought to tell the whole truth: The power went to a mining camp whose life existed only a very few years, and I suppose the expense of taking it there was so great that they did not even get half of the cost back with the high charge that was made. It was run through a desert for one purpose only, and that purpose was mining, and at a time when there was a boom, and now that the boom is over their property is not so valuable.

Mr. SMITH. That is only last year's decision; and the statement which was made by Senator Smoot was, of course, specifically opposed by the members of the commission.

Senator SMOOT. Because they thought that the boom was going to continue on forever, I suppose.

Senator CLARK. I want to ask you this question: I understand from your discussion of this particular case and from what you have said to us that you think that water rights ought not to be capitalized?

Mr. SMITH. The commission allowed the capitalization of the water rights in that case.

Senator CLARK. But I understood that your view is they ought not to be capitalized—and that is the view, I understand, that is taken by the public utilities commission or by the law, in California—but what I wanted to ask is this:

Is it not a fact that the view of certain departments or bureaus of the Government having to do more or less with these water rights, especially on certain portions of the Government domain, is exactly opposite to that—that the water rights should be capitalized?

Mr. SMITH. Well, I would like to say, first, Senator Clark, that I agree with Commissioner Shaughnessy, that this water right should be capitalized at its tangible value, namely, the cost of obtaining and the cost of developing that water right.

Senator CLARK. Yes; but not beyond that?

Mr. SMITH. Not beyond that.

Senator CLARK. And the mere barren right you would not capitalize?

Mr. SMITH. No; I may say that Commissioner Bartine takes the other view, however.

Senator CLARK. Right there arises one of the difficulties. Now, your bureau or independent office believes that that bare right ought not to be capitalized; and a certain other bureau, having as much to do, and perhaps more, with the granting of these water rights, says,

in effect, that that should be capitalized. Now, where is the user to "get off"?

Mr. SMITH. He can "get off" here in section 5—have this legislation express the will of Congress in the matter. In one case over in the House they have cut out any capitalization of the intangible part of a water right or a franchise, and I believe, just as much I believe I am sitting here, that is the view that is coming to be accepted; my opinion is, why should we wait for this matter to be, not decided—that is the trouble—but for this to be pronounced upon in one way or another by Federal bureaus, by State commissions, and by courts, when the will of Congress can be written right into the act as it is before you. And I think that a matter like that should be put definitely into the law.

Senator CLARK. That is one of the things we have been running up against—one of the bureau officers of the Government says to Congress that this water ought to be very carefully guarded, because the water rights, or the power, within certain portions of the public domain are worth, I think he says, as a revenue producer, something like $600,000,000.

Senator WORKS. Well, you may do that, Dr. Smith, so far as the authority of the National Government is concerned, but you certainly can not fix the rate or interfere with the rate-making power of the State by a provision of that kind passed by Congress.

Mr. SMITH. Well, I think the California commission is taking the same view.

Senator NORRIS. And the Nevada commission takes the opposite view.

Mr. SMITH. The Nevada commission takes two opposite views. [Laughter.]

Senator NORRIS. That only goes to illustrate the fact that there is variation in State bodies composed of men, just like there is in the Federal Government, composed of men.

Senator CLARK. I do not think a board could be expected to act unanimously; otherwise there would be no necessity for having more than one member on it.

Mr. SMITH. Well, it seems to me, as I read the decisions and the opinions of the different commissions, that they are coming very generally to that view in the country—take it from California to New York. The arguments made by the California commission are to me strong arguments against putting a tax upon the people to pay for something that did not cost anybody anything.

Senator NORRIS. And something that the people gave.

Senator SMOOT. Well, they have put up an argument and said they would not.

Mr. SMITH. Well, the California commission put in an argument——

Senator THOMAS (interposing). Do you not think it would be well to put in this bill a provision under which some one bureau or department of the Government shall have exclusive authority and control, so that these conflicts of opinion and direction, and sometimes of order, may be avoided?

Mr. SMITH. I think, so far as public lands are concerned, this bill provides for one head, and——

Senator THOMAS (interposing). Yes; but I do not think it broad enough.

Mr. SMITH. And when we come to bureaus, they are not independent offices; the head of the bureau is pretty apt to carry out the policy of the department, and I do not see any difficulty in that.

Senator THOMAS. They are not independent, but they are sometimes quite as conflicting as if they were; and it is almost as necessary to consult them all before you get anything as if they were.

Mr. SMITH. I think the organization of the Interior Department, for instance—during the short time that I have been responsible for one of the bureaus—has become coordinated in a way which was not the case seven years ago; and we are working together.

Senator THOMAS. Well, right here, does not that suggest at least the expediency and the economy of taking the Forest Service and putting it in the Interior Department, or else taking all these other bureaus and putting them into the Agricultural Department?

Mr. SMITH. I would not want to make a statement to that effect before this committee, but I will admit that I have said such a thing to some of my friends in the Forest Service.

Senator CLARK. I think that was Secretary Fisher's idea, as mentioned in some of the hearings before the House.

Mr. SMITH. I am willing to go on record as saying I would like to be more closely associated with the Forest Service, because we do more work in connection with that service.

The CHAIRMAN. Will you resume your statement, Dr. Smith?

Mr. SMITH. Well, it seems to me, that while I have been speaking about the mandatory part of the provision the question is a little bit larger than we have mentioned. It is not simply a question whether it is to be mandatory or merely discretionary power given to some executive officer; but the question is, Is the statute to be so mandatory that it becomes the instrument—and I speak advisedly—of the applicant, so that his right, as some people contend it should, will begin the very moment that he files a duly certified paper of some kind; or is there to be vested in the executive officer of the department enough discretionary power so that the public's equities can be considered?

Now, in that connection, Mr. Cooper yesterday submitted an amendment along that line, giving a certain preference to certain applicants, but still vesting discretionary power in the Secretary of the Interior in considering those applications.

As a matter of fact, the amendments which were suggested by Mr. Cooper, from the standpoint of a practical man, constitute a very plain statement of exactly what I should expect would be done if it was not in the law, but I think it is better to have it in the law. But we can not have just simply a bare mandatory provision that "first in time is first in right," because we are all the time up against the consideration of cases—and I have under consideration at the present time a case that bears that out—where the first applicant in time has not the prior right from the State for the water; and, furthermore, we might be forced to consider the fact that the first applicant is not going to make the largest development of the power.

Senator CLARK. Well, the question that I asked at the begining of this hearing, in regard to this very question, was whether or not the

bill should not make it mandatory, in a case where a man has fully complied with the law as it shall be written, and has further complied with all the regulations that shall have been promulgated by the department in regard to this particular matter and has shown that he is qualified to take a permit under the law and the regulations—whether it should not be mandatory upon the Secretary to grant his permit? That was the proposition that I started out with at the beginning of these hearings.

Mr. SMITH. I think that would be the effect; and I can not conceive of circumstances under which a man would be turned down, on some irrelevant question, in a case of that kind.

Senator CLARK. Well, if putting that mandatory provision in the bill would have no other effect than simply to remove some of the distrust that exists in some quarters as to possible future action in the department, it would be well to put it in the bill for that purpose.

Mr. SMITH. Well, that would probably be the effect of some such terms as those contained in the amendment suggested by Mr. Cooper. I do not know how you could write into the law words which would decide a case—of which I have a memorandum here—involving a small water-power development on a river out in Washington; because I think it is a far easier thing for the Secretary to decide a case when he has a full presentation of the facts before him.

Senator CLARK. Suppose there are written into the law such things as have to be complied with by the applicant, and he fulfills all those conditions; then suppose under the law the Secretary is given authority to make rules and regulations by means of which this law shall be put into effect. Now, if a man complies both with the law and all the rules that have been promulgated, ought he not, as a matter of course, to have the right to have his application favorably considered?

In other words, after man has brought himself within the law and the regulations, ought he not then to have an assurance that his application will be favorably considered?

Mr. SMITH. I would agree with you as to that if I thought that we were able to write into the law or into the general regulations enough details to fit the conditions of each and every case, but those are changing right along. And not only that, but there are cases coming up—I could not say now exactly why, on the face of the papers before the department, that case of the Hillside Reservoir was not a perfect case; it was simply that there were some engineers connected with the Geological Survey that thought that the facts were other than represented.

Senator CLARK. Well, that is a mere question of proof, of course.

Mr. SMITH. And all of our representations have been contradicted from time to time. But the fact remains that that same company, or its successor in interest, goes before the rate-fixing commission of Nevada and puts up a valuation based on that power site on that stream.

Senator CLARK. Well, of course, the providential killing of Ananias has not stopped falsifying in this country; but usually those are questions of fact which can be determined.

Mr. SMITH. They take time to determine; and if any legislation said "shall," and the right is initiated with the filing of a paper——

Senator CLARK (interposing). Well, I am not speaking of the initiation of a right by the filing of a paper; I am speaking of where a right may accrue and where a man may, as a matter of fact and as a matter of law, have complied with all rules and regulations that have been promulgated in the administration of that act.

Mr. SMITH. Well, from my practical experience in the department I can not conceive of such a case where a man would not get his rights and get them without delay.

Senator CLARK. I know; but as long as that is true, do you not think it would be well if you could remove some of this distrust which you and I both know exists as to the administration of these laws? We know that, and we may as well face it. Now, if we could remove that by writing into the law the mandatory provision which you speak of, which you say would not affect the matter one way or the other, why would it not be a good plan to put it in?

Mr. SMITH. Well, right there, I think that we ought also to have this law take care of the distrust that the public generally feel of promoters, so that we will have a law that not only protects the consuming public, but protects the investing public.

Senator CLARK. That is it exactly; and the investing public and the consuming public, it seems to me, ought to have some definite knowledge that when they have done certain definite acts and complied with certain rules and regulations, no matter what—that when that time comes that they have complied with those, they will have some assurance that their application will receive favorable consideration.

Mr. SMITH. There was one element that has been brought up in certain of these cases in the last few years that was not in the law—perhaps you will say it was in the spirit of the law—we attempt to try to distinguish or give a preference between the man who comes up to the department with his application, who is a man that represents engineering ability and represents financial ability enough to put the project through—to differentiate between that type of applicant and the man who, almost on the face of things, shows that he is nothing but what might be called a "pocket peddler" of whatever right he can get from the department.

Senator CLARK. You could stop the peddler of rights easily enough.

Mr. SMITH. Well, you know that is done. You say we could stop the peddler of rights; we do not want to stop the transfer of rights. It seems to me that the moment a mandatory provision is put in this legislation, the law is going to be filled up with so many restrictions that you can not work under it.

Senator CLARK. Well, I do not think there would be as much work under it without the mandatory provision.

Mr. SMITH. Some people have objected to some of the prohibitions. Why? I think one case is where, on the floor of the House, a provision that was discretionary with the Secretary was so amended that it became mandatory on the Secretary. Now, if you will take the bill and go through with it, you will see that the discretionary elements in the bill, in many cases, are permissive; they grant something to applicants who come under a certain classification that can not be granted in all cases. Now, I want to be plainly

understood in saying that I think that any mandatory provision which could pass Congress at the present time, under any conceivable conditions, would be full of prohibitions, which Mr. Cooper and Mr. Mitchell, and the other men representing the practical side of the water-power development, would object to.

Senator CLARK. Bear in mind, please, that I am not advocating making everything mandatory; but it has seemed to me that, under the authority to make rules and regulations, the discretion of the Secretary might be included in those rules and regulations, as well as arise after the rules and regulations have all been fulfilled and complied with; that was my notion.

(Thereupon, at 12.10 o'clock p. m., the committee adjourned until to-morrow, Saturday, December 19, 1914, at 10 o'clock a. m.)

79917—15——25

WATER-POWER BILL.

SATURDAY, DECEMBER 19, 1914.

UNITED STATES SENATE,
COMMITTEE ON PUBLIC LANDS,
Washington, D. C

The committee met at 10 o'clock a. m., Hon. Henry L. Myers (chairman) presiding.

Present: Senators Thomas, Robinson, Chamberlain, Smoot, Clark, Works, Norris, and Sterling.

The CHAIRMAN. Mr. Fisher, we will be glad to hear from you if you are ready to proceed now.

STATEMENT OF HON. WALTER L. FISHER, OF CHICAGO, ILL., EX-SECRETARY OF THE INTERIOR.

Mr. FISHER. Mr. Chairman, perhaps I might say at the outset that the principal reason I have come on to this hearing, in addition to a desire to present to this committee, if it will be of any service to it, any information I have, is the very strong feeling I have that it would be something in the nature of a public calamity to the country as a whole, and especially to the West, if this opportunity to pass a fair and reasonable water-power bill should fail either through the unwillingness of certain of the power interests to accept what seems to be not only right but inevitable provisions in the public interest, or through any failure of the Senate or the House to understand, at least, the view of those of us who have been attempting, as best we could, to advocate that sort of public protection.

I am very much impressed with the fact that through a very considerable period of time during which I have had to do with this question, it has been made apparent to me that there is a radical difference in the ranks of those who are actively engaged in developing water power. I have observed now, for a good many years, that, broadly speaking, there are among those who are interested in water-power development two quite distinct classes. There are some men who are impressed with the private side of this question so strongly that I think they fail entirely to realize the public side of it and, either through their interest or through natural human inability to put themselves in the place of the other fellow, they are opposing what I think are the real interests of the very men who wish to be engaged in these enterprises from the point of view of financial profit and the general promotion of industry and development in this country.

On the other hand, there are a good many men in the water-power business who are quite broad minded, who realize that there are

certain things that must be conceded and that ought to be conceded in the public interest even though those things do, to some extent, embarrass them in raising money and in promoting their various enterprises.

I am sure that both of these classes of men naturally influence Congress, both the Senate and the House, and I should say not improperly. I mean those members of the Senate and of the House especially who have in their respective States either a considerable existing water-power development or the possibility of having a very considerable water-power development. They naturally come in contact with men who are pushing those enterprises and they naturally listen to their views, as they should, and they are naturally and inevitably influenced by the statements which these gentlemen make as to their difficulties and as to the difficulties that will arise if legislation of a certain kind is enacted. All of them, of course, in both of these classes of men, are thoroughly dissatisfied with the existing law and have been for a great many years. They are no more dissatisfied with it, however, than are the men who have had to do with the official administration of the law, or the men who have actively interested themselves in trying to promote proper legislation unofficially.

But when it comes to the question as to what you are going to substitute for the existing law, a difference of opinion at once arises. If you suggest to certain of the power people that there ought to be such and such a provision inserted in a statute, in the public interest, instantly you find that a number of them, estimable gentlemen and largely interested in development, throw up their hands and say right away that it will create such and such a difficulty in their plans; that it will make it hard for them to raise money; that it will retard development. Others among them see these same difficilties. They see that any restriction of any kind that is put upon power development will necessarily be, to some extent, an obstacle to raising money, but they also see that certain restrictions are not only reasonable but really necessary and they are ready to acquiesce in them.

But the difficulty is that you find in these hearings before you, just as I found in hearings before me as Secretary of the Interior, that the more reasonable men among the developers of power are restrained from expressing themselves as fully publicly as they are willing to express themselves privately. And that is due to two things: It is due, first, to the active intervention of their more radical associates in power development who insist that the broader minded people, as I conceive them to be, are interfering with the general class interest that to some extent is involved and that if they will just keep still and keep in the background, legislation can be obtained that will be more favorable to the private interests than would be obtained if these gentlemen say frankly what they think.

Senator SMOOT. Mr. Fisher, I do not believe that the members of this committee are so much worried over the question of regulation as they are over the question as to who shall regulate?

Mr. FISHER. Yes.

Senator SMOOT. I do not believe there is a member of the committee but who recognizes the fact that there should be some control. I do not believe there is a member of the committee but who believes that we can all arrive at what would be a proper control

But the great question in this is not the details in the bill as to the amount that should be charged or that should not be charged, but it is the question as to who has the right to regulate and whether this bill does not establish a precedent that the Government of the United States can charge for the use of the waters of a State. That is more vital, I think, than the mere fact of whether the power man wants control or whether he does not want it. And, as far as I am concerned, I am not going to take that into consideration. There is a deeper question in my mind, as I have suggested, and I would like to have you address your remarks to that point - the question of whether the Government of the United States has a right to control the waters within a State.

Mr. FISHER. Senator, I am very glad to hear you say what you do.

Senator WORKS. Mr. Fisher, there is another matter that might be suggested, I think; that is, so far as I know the desire of this committee, so far as it affects the Western States in which irrigation prevails, that there should be the most effective regulation and control of the operations of these companies. But one of the vital questions is not only the question of jurisdiction, but the question as to whether Federal control and regulation would be as effective as State control where we have—for instance, as in California—all of the machinery already prepared by law to regulate these corporations, I think, fully and effectively.

Mr. FISHER. That question also seems to me very important and very interesting. However, I have said what I have thus far said because since I arrived here yesterday I have gone through the record of the committee at this hearing and I have found in that record quite a considerable discussion of some of these matters which seem to me fundamental. I am quite impressed with the fact that the committee is not unanimously of the opinion expressed by Senator SMOOT, but I note that there seems to be some discussion of some of those matters that seem to me fundamental, whether the State or the Federal Government regulates, and there seems to be quite a difference of opinion on these subjects. I find certain of the witnesses who have appeared here, representing the power development side, I mean from the private point of view—and I do not say that at all in criticism; I think they should be here and say frankly what they do think—but I find some of those witnesses seem to be discussing the very fundamental question of any regulation, whether by the State or Federal Government, and such questions for instance, as compensation. I find a discussion as to whether the granting power, whether the State or the Federal Government, should as a matter of fact exact any compensation at all.

SENATOR SMOOT. As I remember, most of the witnesses have—especially those who have come from California, and everyone, as I remember—stated that the utilities commission or the railroad commission of California was very satisfactory to them.

Mr. FISHER. Oh, yes; but that still does not meet the points I have mentioned.

Senator CLARK. Mr. Fisher, did not the point you mention, as to whether the Government shall exact compensation for the use of the waters, at the same time take into account the question of the proper authority to control?

Mr. FISHER. No; there is that question, Senator Clark, but in addition to that, you must recall considerable discussion in this record as to whether or not the imposition of compensation of any kind, whether by State or Federal Government, was not an indirect tax on the consumer.

Senator CLARK. Oh, yes.

Mr. FISHER. There are a lot of fundamental questions of that kind which do not touch the question of whether the State or Federal Government shall do it, but do touch the question of what should be done if either the State or the Federal Government regulates.

Senator CLARK. That is true.

Mr. FISHER. Considerable emphasis has been placed upon those things and I thought it might be helpful just to refer briefly to two or three matters that seem to me to throw some light upon it.

My method of approaching this thing, Senator, would be this: I should consider first what ought to be done in the public interest, by any governmental agency, no matter whether State or Federal - I do not mean the minute details, but what ought to be in any permit whether granted by the State or Federal Government—but, having ascertained those things, then I would inquire which agency, State or Federal Government, was the most appropriate agency to do it, whether there were any legal questions involved and whether there were any questions of policy and, above and beyond all else, whether the most effective way of accomplishing those things, both in the interest of the power developer and the public, was not to have the State and the Federal Government cooperate in producing the desired results.

However, the first thing in any intelligent discussion of the matter, it seems to me, is to determine what is the result to be desired, and it was with that purpose that I was starting to discuss some of those fundamental questions, and I will try to be as brief as I can.

A number of years ago I was appointed a member of the so-called committee of twenty-one, or commission of twenty-one, appointed by the National Civic Federation. It made what at that time was undoubtedly the most extensive study of public utilities that had been made anywhere. A considerable fund of money was raised for the purpose of providing that commission with expert advice, engineers, and accountants. That commission took illustrative cases in the United States of the various public utilities in connection with electric light, street railways, water, and things of that sort, and also took illustrative cases in Europe, particularly in Great Britain, taking, upon the one hand, an illustrative case of the public ownership and operation of such a utility, and, on the other hand, the private ownership and operation of such a utility, and checked them up generally and then put engineers at work on the plants and equipments and put accountants to work on the financial records with a view to comparing the two.

Now on that commission were representatives of the different interests, like Melville E. Ingalls, president of the Big Four railroad, who was chairman, and it embraced in its membership such men as Mr. Clark, who represented the General Electric Co.; Mr. Edgar, who represented the Boston electric light and power development -I forget whether it is called the New England Edison Co. or the Boston Edison Co.; Mr. Walton Clark, of Philadelphia, who represented the U. G. I.; and

a number of other people. And there were a number of men who might be said to represent the radical side, like Parsons, of Boston, and Bemis, of Cleveland—men of that type.

Now, the remarkable thing about it was this, that when we got down to the final preparation of the report we were able to get an absolutely unanimous report upon the various conditions which it was conceded, as a result of our investigation, ought to be required of any privately owned and operated public utility, with the single exception of Mr. Walton Clark, of Philadelphia, who dissented. Mr. Clark, who represented the General Electric (I have forgotten his full name, I think it was W. J.) and Mr. Edgar who represented the Boston Electric Light people noted a difference of opinion as to the method of expressing one or two things in the report, but concurred otherwise. Mr. Clark, of Philadelphia, concurred in nothing and disagreed with everything there was in the report and even where there was something where he did not disagree as to the substance of it, he wanted to state it in some other way.

Senator CLARK. I suppose that runs in the blood. [Laughter.]

Mr. FISHER. I think so. It was possibly a natural condition due to the individual and due to his point of view.

I have called attention to that because you will find that that report unanimously, with the exceptions I have mentioned, agrees that certain things ought to be done in the public interest, such as the provision for a term grant, the reservation of the power to take over, the provision for compensation, the provision for the regulation of rates, and things of that sort that in those days were not so clear as they are now.

And if you take the report of your International Waterways Commission, unanimously made to the Senate; if you will look at that report you will find it signed unanimously by men of the greatest difference in point of view, certainly many of them who could not be accused of radicalism or undue neglect of the proper protection of private investment. Those men unanimously agree on certain things which seem to be in dispute between members of your committee. That commission unanimously recommends certain things which seem to be still subject to dispute here.

Now I had before me, as Secretary of the Interior, quite an extensive conference with the power people to which I invited those gentlemen to discuss the question of what regulations ought to be adopted by the Secretary of the Interior to carry out the existing law and make it as effective as possible in both the public and private interest; and the same differences of opinion developed there that have developed here. For instance, I have been very much interested in the testimony given to you by Mr. Cooper. Mr. Cooper complained of few of those things that were complained of by others. If you will take his testimony, as I took and read it last night, you will find that he has very little complaint in regard to many of those things which seem to bother many of the other gentlemen very much.

Senator SMOOT. Mr. Cooper's plant was built on a navigable stream and not a nonnavigable one. I think Mr. Cooper went so far as to say that he believed that the water belonged to a State in a nonnavigable stream and the regulation of water within a State was quite different from the regulation of waters within a navigable stream.

Mr. FISHER. In certain respects, but not in regard to any of these matters which I am now discussing. You will find, of course, he said there was a difference, and there is a difference, but not as to any of these matters that I am discussing. These relate to the question of what the State should exact if it were to grant the power, quite as much as to what the Federal Government should exact if it were to grant the power. You find a lot of these gentlemen insisting that neither the State nor the Federal Government should exact certain things, and their opposition does not depend upon who grants the permit, but it relates to what kind of a permit either the State or the Federal Government should grant.

Senator WORKS. Mr. Fisher, that only involves a question of dollars and cents. At least, that is a question of whether it does not add that much of a burden on the consumers. I do not think the power developers are very much interested in that question, myself.

Mr. FISHER. They seem to be, Senator.

As Secretary of the Interior I had a hearing and discussion at which there were a number of gentlemen representing that side of the question, and I noted that the chief anxiety about the protection of the consumer and about the question as to whether the State ought not to run these things is almost invariably voiced by the representatives of the power developers.

Senator WORKS. Well, they may use that as a means of defeating objectionable legislation, but what I am talking about is the practical effect of it. When you put the law in force, certainly any sum of money paid by the developing corporation will be charged up against the consumers as a part of the operation expenses and eventually the consumer will have to pay it. It may amount to a very small matter, probably will; but I am talking about the principle and practical effect of it.

Mr. FISHER. There is a differeone between the principle and the practical effect of it. The difficulty is this, that because in certain aspects the exaction of compensation by the granting power theoretically may possibly have an effect upon the price paid by the consumer, that theoretical possibility is used as an objection to a very practical provision which, in my judgment, will have precisely the opposite effect. I think you brought it out, Senator, in the question you asked certain of the witnesses. I think your very questions put yesterday indicate that in your opinion, those things will have no practical effect of increasing the price to the consumer, for you make it clear that what you are doing is emphasizing the purely theoretical side of it and concede, by the very form of your questions, that it will not have any practical effect.

Senator WORKS. No, I do not think it is a matter of theory, Mr. Fisher. It is a legal proposition that I am presenting. Legally speaking, of course, the charge is made against the consumer. There is not any question about that. But what the practical effect of it will be as to the additional amount that the consumer will have to pay, that is another matter.

Mr. FISHER. Well, it is of little consequence to the consumer if it does not have any effect upon what he has to pay.

Senator WORKS. Certainly.

Mr. FISHER. If the State or the Federal Government, whichever grants the permit, exacts compensation and by that requirement is enabled to make its regulation effective—and it can make it effective in no other way so well—and that regulation or that exaction of compensation does not affect the price to the consumer, there would seem to be no valid public objection to it. Experience justifies us in the conclusion that upon the contrary we get certain very distinct public advantages by exacting compensation. And that, it seems to me, disposes of the matter and disposes of it in favor of reserving the compensation. But it is not true that, even as a matter of theory, the exacting of compensation from any hydroelectric development does increase or does affect the price to the consumer. There never has been any successful attempt to answer the proposition put forward by the Commissioner of Corporations, in his report some years ago on water power and repeated by a great many others, among them myself, that, as a matter of fact, there are very few communities in which hydroelectric power furnishes or is able to supply the entire market. A large portion, varying in different places, is always furnished by steam-generated power. If the steam-generated power costs more to produce than the water-generated power, it is perfectly apparent that no regulation by either State or Federal public utility can reach the situation so as to protect the consumer. You can not discriminate, in regulating the price of power to the consumer in a given community, between the sources from which it is derived. You can only regulate the price of electric current as it is delivered to the consumer, and that for several reasons.

Senator SMOOT. Mr. Fisher, right there I wish to say that in relation to the production of electric power by steam in most cases it is done for the purpose of carrying over the peak loads. They do not run for the full 24 hours in every day.

Mr. FISHER. By steam?

Senator SMOOT. By steam. And one other thing in connection with steam power is this, that in many places they are compelled to have a power that is more reliable than the power upon a long transmission line that is affected by the winds and affected by the lightning and affected in an untold number of ways. I know companies that keep steam powers as reserves, and that only, and they are compelled to do it. Now, they are charged up as steam powers, but there is no necessity for them except in case of accident or safety.

I know of cases where there are steam powers that do not run over three or four hours of the 24 to carry the peak loads that come when the street cars are heavily loaded or some great power consumer requires extra power at a particular time of the day. Those things, I think, are the reasons why steam power is used in connection with electric power and why it is stated that there is not sufficient power to take care of the consumers.

I understand now, and it was so stated by one of the witnesses, that the amount of power produced in lower California is something like 25 per cent more than is wanted in the way of consumption. I suppose the time will never come when they will not have to have more produced than the consumer really needs, because the trade is growing so rapidly.

Mr. FISHER. Senator, I am fairly familiar with the use of auxiliary steam power in connection with hydroelectric power. That is not

what I was talking about. While it is quite true that auxiliary steam power is used and required in many cases to supplement the requirements of a hydroelectirc company, it is also true that in many cases the steam power is generated entirely outside of that and in competition with the hydroelectric company. I am discussing conditions of that character and not of the other character.

I am also aware of the fact it is contended by certain people that steam power, as a matter of fact, can be developed for less than hydroelectric power and it possibly can in some instances. But, in those instances what I am now discussing has no application. Nevertheless, there does remain a considerable field in which the principle to which I have just called attention applies directly and in which it is apparent that the theory of regulation can not reach the case.

In addition to that we all know, from our own experience—those of us who have had to do with public utility commissions—that the regulation of the price is, as a matter of fact, seldom if ever affected by the amount of compensation exacted by the State or local community. We find that what happens, in many instances, is that where taxation increases or where compensation is exacted, the net returns upon the stock of the corporation, and the dividends nevertheless increase and that, as a matter of fact, this theory that because you have exacted compensation to be paid the Government, the price paid by the consumer must be affected never has and never does work out in practice.

Senator SMOOT. Take the California Railroad Commission.

Mr. FISHER. Yes.

Senator SMOOT. They first find out what the physical value of the property is, the actual value of it. Then they take into consideration the expense of maintaining it and operating it, and due allowance for depreciation. Then they make the rate based on that valuation?

Mr. FISHER. Yes.

Senator SMOOT. Now that power is taxed by the Government or by the State. That is taken into consideration and the rate made accordingly.

Mr. FISHER. Yes.

Senator SMOOT. And how can you say that the consumer does not pay the charge in a case like that?

Mr. FISHER. In a case like that, where the tax is put in as a part of the cost and has any appreciable effect upon the price, of course the consumer does pay that, Senator.

Senator SMOOT. That will be the case in every State that has a utility commission that amounts to anything.

Mr. FISHER. Unfortunately not. It has not worked out so in the past, and one of the experiences we had, while I was Secretary of the Interior, was with reference to this very same California commission. I called in my office this conference with representatives of the power people, inviting all those I knew to be at all active in this matter; and a very considerable number of them came. I see here in the room a number of those who were there. And, among other things, I invited the members of the California commission, and Mr. Eshelman, who I understand was chairman of that commission, was present. He is a man who is exceedingly popular, and I think has just been elected lieutenant governor.

Senator WORKS. Yes.

Mr. FISHER. He is a very efficient man, and he was present, and there were also representatives of some of the same California interests which have appeared before your committee. And they expressed a great deal of anxiety about the Federal Government slopping over onto the functions of the State of California and spoke about how effectively they were being regulated by the State commission. I expressed then the same sentiment or opinion that I have expressed here, namely, that it was very singular to me that that anxiety was always expressed by the representatives of power development, and I asked Mr. Eshelman how he felt about it. Mr. Eshelman had no hesitation whatever in saying, very definitely, that he had no apprehensions about the Federal Government in any way impinging upon any of the functions of the State of California or of his commission; but, on the contrary, he and his commission welcomed it and thought it was wise public policy.

Now, we put it up to Mr. Eshelman, and he had another representative of the commission present with him, Mr. Marks, I think, of the water commission. Mr. Eshelman, I think, was representing the railway commission and Mr. Marks the water commission, so we had the two interests there, and we asked them how they felt about it. We put before them all of these various suggestions involving compensation, involving regulation, and involving all of those things that are in this Ferris bill, and they said they not only had no objection to them, but they said they welcomed them, that they thought them wise things from a public point of view.

Now I happen to have here a transcript of the proceeding, and Mr. Eshelman said:

> I would say that I agree absolutely that there should be not only coordination of the work, but where there is any doubt or there will be any overlapping of jurisdiction or authority, in any regard, I think that it should be taken care of both by the Federal and the State Governments.

Now, I do not know just how you could get a more authoritative declaration from the point of view of a State utilities commission as to the question of overlapping on State authority, to which I find in your hearings the most attention is given.

Senator SMOOT. This bill does not provide for any cooperation between the Federal Government and State commissions.

Mr. FISHER. I think it does just that, if you will pardon me.

Senator SMOOT. Of course, I should put it this way, that in my opinion it does not.

Mr. FISHER. You are right in saying it does not in terms provide any coordination or cooperation, and it does not provide any machinery for cooperation, but the very effect of the bill is necessarily in that direction. The bill does contain, as you will remember, a provision that the Federal Government is to exercise its regulatory functions only where the State government does not provide an adequate commission, and the bill does provide for compensation.

Now, the compensation feature is a very essential provision for effective cooperation. It is only in that way——

Senator SMOOT. The bill provides, of course, for compensation to the Government; but it does not say anything in relation to compensation to the State at all.

Mr. FISHER. Oh, I understand that; but it does provide—I am now speaking to the cooperative features—for compensation to the Federal Government, and this bill provides that one-half of the money so derived shall go first to the irrigation fund, and, second, that it shall go to the State. Now, that is very practical cooperation. It may not be as effective as some other means of cooperation.

Senator CLARK. Mr. Secretary, that is not exactly cooperation, but that is a sharing in the profits.

Mr. FISHER. Yes.

Senator CLARK. Now, where in this bill is the State granted any cooperation in the question of site, in the question of operation, or in the question of anything except that which you have mentioned?

Mr. FISHER. I have mentioned, I think, Senator, that which seems to me to be of most vital interest to the citizens of the State, namely, the regulation of service and charge. I assume that the people of the State of California are more concerned in the question as to the service they get and the price they pay for it than in anything else, and that very thing is provided for in this bill, that the Federal Government shall exercise jurisdiction over that and over the regulation of securities issued by those companies or grantees until such time and only until such time as the State provides an agency to accomplish that.

Senator CLARK. Just where is that stated in the bill in clear and unequivocable form, Mr. Secretary? In section 9?

Mr. FISHER. I think you will find it in section 9. Section 9 reads:

That in case of the development, generation, transmission, or use of power or energy under a lease given under this act in a State which has not provided a commission or other authority having power to regulate the rates and service of electrical energy, and the issuance of stock and bonds by public utility corporations engaged in power development, transmission, and distribution, the control of service and of charges of service to consumers and stock and bond issues shall be vested in the Secretary of the Interior or committed to such body as may be authorized by Federal statute until such time as the State shall provide a commission or other authority for such regulation and control.

Senator CLARK. Now, Mr. Secretary, what would you infer that to mean, for instance taking the California laws to which reference has been made, that in California, the Federal Government, under this bill, would not have any power to regulate rates or service for electrical energy and the issuance of stock and bonds by public utilities corporations?

Mr. FISHER. I should think so.

Senator CLARK. That, so far as California is concerned, in that State, where they have a public utilities commission, this bill is futile and that there is no power conferred upon the Federal Government in those respects?

Mr. FISHER. So far as intrastate business is concerned.

Senator CLARK. Right in connection with that, I want to read you section 3, which says:

In case of the development, generation, transmission, and use of power or energy under such a lease in a Territory, or in two or more States, the regulation and control of service and of charges for service to consumers and of the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior or committed to such body as may be provided by Federal statute.

Now, nearly every plant has an interstate business and under this the intrastate business would be controlled by the Federal Government.

Mr. FISHER. The control of interstate business, of course, I assume was what was intended to be covered by section 3; and the entire matter as to how far the control of interstate business would affect interstate business I also assume would be entirely under the control of Congress to the extent, and to that extent only, that it was a proper part of the regulation of the interstate business. The same questions have arisen in connection with railroad matters. The fact, Senator, that the transmission of hydroelectric energy over long distances has now progressed to such a point that this business is tied up and has become largely interstate in character is a fact which can not be changed by any legislation. It can only be recognized and dealt with by legislation. It is exactly the same as the situation has been in the railroad world. You are facing an inevitable economic development, and you have to deal with it just as you had to deal with it in the case of the railroads. You will find the demand that you deal with interstate transmission of electric power just as emphatic and just as irresistible as has been true of the railroad work, and you will find that same demand made by the power developers themselves, just as it has been and is being made by the railroads.

In my opinion the interests of an investor in and developer of hydroelectric energy are identical with the extension of Federal authority over these interstate concerns in the same way and to the same extent and no further than is true in the case of the railroads.

Senator CLARK. Taking that practical possible condition, as far as a corporation was organized under the laws of the State of California, whose initial purpose was simply to transmit energy within the State, in that event, according to your notion, the Government would have nothing to say in regard to the amount, character, or price at which securities should be issued.

In the course of their business it might develop, as the railroads have developed from the start, that their business eventually crosses State lines into Arizona or elsewhere. Now, it is not to be assumed, I suppose, that any of the securities which theretofore had been issued would be under the control of the General Government, but only those that were thereafter issued?

Mr. FISHER. I should assume so.

Senator CLARK. You think that would be the legal effect, as the bill stands?

Mr. FISHER. That would be my judgment. That, I think, is a true statement as to the railroad securities, is it not?

Senator CLARK. I think so. I just wanted to get your notion on that.

Mr. FISHER. I think so.

Senator NORRIS. I would like to ask you, right along that same line: Suppose this bill was enacted as it stands now and some corporation under it develops water power in California, where they have a commission, and they extend their lines across the line into Oregon, where they likewise have a State commission, is it your idea that the service and the rates in California, in such a case, would be fixed by the California commission, and that the service and the rates in Oregon would be fixed by the Federal authority?

Mr. FISHER. I assume that in the first instance that would necessarily be so, Senator.

Senator NORRIS. Would it be different from any other instance of that kind where that is the case now?

Mr. FISHER. I should think that probably would be the result, modified only by the same considerations that modify the same situation in the railroad world, as shown by the Minnesota case, or the Texas case.

Senator NORRIS. In the particular case I have put, the stocks and bonds of this corporation would be under the control of the Secretary, would they not?

Mr. FISHER. I think along the line that Senator Clark has suggested, those subsequently issued would probably be under the control of the Secretary.

Senator NORRIS. Originally?

Mr. FISHER. You are speaking of a concern that starts with this interstate business?

Senator NORRIS. Yes.

Mr. FISHER. I suppose they would be.

Senator NORRIS. The stocks and bonds of the corporation in California, in that case, would be under the control of the Secretary of the Interior too, but the service and the rates in California would be under the control of the California commission?

Mr. FISHER. Well, subject to the conditions that I have referred to. I assume that there is constantly increasing, and inevitably will increase, whether we like it or not, a necessity for recognizing the effect upon interstate business of the business strictly confined within the limits of a State.

Senator NORRIS. I do not see any modification that could come there. The stocks and bonds, of course—the money derived from the sale of stocks and bonds—would be used to develop the plant in California and also in Oregon?

Mr. FISHER. Yes.

Senator NORRIS. Of course it is conceded, I think, under the bill, that if they did not cross the line into Oregon then the Secretary would not have anything to do either with rates or service or stocks or bonds?

Mr. FISHER. Yes.

Senator NORRIS. But I am putting a case where they start with the avowed intention, carried out, to develop energy in California and sell it both in California and Oregon, and the stocks and bonds for that concern could not be differentiated as to what part should be used in one State and what in the other. In that case the Secretary would control the issue of those securities?

Mr. FISHER. He would.

Senator NORRIS. Continually and all the time?

Mr. FISHER. I assume so. What is the alternative? They must either be controlled by the State of California alone, it being, as I understand in your case, the State where the incorporation occurs——

Senator NORRIS. Yes.

Mr. FISHER (continuing). With the consequent complaint that might come from Oregon, the other State, that its interests were not being properly looked after, or the State of Oregon would have to intervene and by appropriate laws covering the transmission of electric energy within its boundaries, compel the corporation to reincorporate in the State of Oregon, which is the case with the rail-

roads, thus leading to the very difficulties that have arisen, for instance, in the case of the Milwaukee & St. Paul extension, and to great complaint on the part of power developers and investors.

Senator NORRIS. I have felt, individually, that that was really not the intention of the bill. It is my idea that is what the bill ought to do, but I have had some doubt as to whether there was not a conflict between section 3 and section 9 in that kind of a case that I have put, and whether it would not raise some legal difficulty if there were not some change made in the bill.

Mr. FISHER. I have assumed that the bill had the intention you speak of and I have not thought that there was any conflict. But I have not examined the bill for the purpose of seeing that the precise language in any one section fitted in with the precise language in another section. I have been more concerned with the general features of the bill than with the specific language.

Senator STERLING. Did I understand you to say, in answer to Senator Norris, that you thought that the public utilities commission in Oregon, to which State the power was transmitted from California, would have the power there to fix the rates?

Mr. FISHER. No; I assume not. If the power was transmitted from California into Oregon, I assume it would be interstate in character and that the Secretary of the Interior would have the power, under this bill, to make regulations.

Senator STERLING. Notwithstanding a public utilities commission existed in the State of Oregon?

Mr. FISHER. Quite so. Now an interesting thing in that connection is that those two States which you happen to take by way of illustration, are two of the States in which the theory of practical Federal cooperation has been recognized by the State commissions as well as the Federal Government. The State of Oregon has had no difficulty with the Federal Government in getting into effective cooperation, and there has been no complaint from the State of Oregon of any intrusion upon its powers on the part of the Federal Government. On the contrary, the activity of the Federal Government has been welcomed.

I happen to have here a copy of the report of Messrs. Henshaw-Lewis and McCaustland on the cooperation of the Federal Government with the State government of Oregon in the development of the Deschutes River, and I note, on page 142 of that report, this statement:

> There appears to be no very secure foundation for the theory of State control of waters on the public domain. Neither the act of 1866 nor the desert land act of 1877 can be considered as an irrevocable grant to the State. The first act merely confirms rights which have become vested by appropriation and use under the local laws and customs, and the act of 1877 strengthens this view of the former act and, in addition, enacts that all surplus water, together with all other sources of water supply upon the public lands and not navigable, shall be held free for appropriation and use for three purposes—first, irrigation; second, mining; and third, manufacturing. This is merely an offer and does not bind the United States until the offer is accepted and the water diverted and used for one of these purposes.
>
> Concerning this question of State control of waters on Federal lands, the Supreme Court of the United States held in the case of the United States *v.* Rio Grande Dam and Irrigation Co. (174 U. S., 690,703) that:
>
> "Although this power of changing the common law rules as to streams within its domain undoubtedly belongs to each State, yet two limitations must be recognized: First, that in the absence of specific authority from Congress a State can not by its legislation destroy the right of the United States, as the owner of lands, bordering on

a stream, to the continued flow or its water, so far at least as may be necessary for the beneficial use of the Government's property; second, that it is limited by the superior power of the general government to secure the uninterrupted navigability of all navigable streams within the limits of the United States."

Kinney comments as follows:

"In other words, the court holds that the jurisdiction of the United States over the natural water course (upon the public domain) is superior and paramount to the jurisdiction of any State; and that all needed measures may be taken by the Government to preserve the water courses of the country for at least the two purposes named above, even against the action of any State in authorizing, under its laws appropriations to be made. The court, especially in the Kansas-Colorado and Rio Grande cases, clearly intimates, to say the least, that the Government might also make other claims to the water than for its use for navigation or as a riparian owner. Whether it will do so time alone can tell."

And so on.

Senator SMOOT. Who expressed this?

Mr. FISHER. Kinney.

Senator SMOOT. Representing whom?

Mr. FISHER. He is the text writer.

Senator ROBINSON. He represents the State Utilities Commission of Oregon, does he not?

Mr. FISHER. I do not know whether he does or not, but this is a quotation from this report.

Senator SMOOT. I wanted to know in what case Kinney expressed the opinion just read?

Senator THOMAS. It is the Rio Grande Dam Case.

Mr. FISHER. It is in his work on irrigation and water rights, second edition, page 1096. That is where that particular quotation is from.

Senator ROBINSON. And it is quoted, with approval, in this report which you read?

Mr. FISHER. Yes; it is quoted in the report which I have just read.

Senator ROBINSON. What report is that?

Mr. FISHER. That is the report made by F. F. Henshaw, John H. Lewis, and E. J. McCaustland to the United States Geological Survey and prepared in cooperation with the State of Oregon, John H. Lewis being the State engineer.

Senator ROBINSON. He is the State engineer of Oregon making that statement and which is quoted by Kinney with approval and which is impliedly approved by all three of that commission?

Mr. FISHER. Yes; I assume so, as it is taken from a report made jointly by them.

Mr. SMITH. This part, however, is by the State engineer.

Mr. FISHER. Parts of this report seem to have been prepared by one man and parts by another, and this part was prepared by the State engineer.

Senator CLARK. I am sorry Senator Chamberlain is not here this morning. I am not familiar with the terms of the organic act or with the terms of the State constitution of Oregon. But do you think that the statement which you have just quoted would apply in its broadest sense to waters in those States where both by the organic act and by the constitution ratified and accepted by the Congress of the United States, the ownership of the water passes to the State?

Mr. FISHER. I do not think that the water passes to the State in the sense in which it has been frequently claimed.

Senator CLARK. I wanted to get your view on it.

Mr. FISHER. It is one of those things as to which I think it impossible for any lawyer who wishes to express himself guardedly

and carefully to speak with entire confidence. All that can be said is that it certainly is not clear that the Federal Government has lost entire interest in the matter. And that, I think, is as far as can be gone by a lawyer whose word may be of any consequence. I do not conceive there is anything, however, in the Ferris bill or in any properly drafted water-power bill passed by Congress that in any way conflicts with anything that the State has in mind, or which is not with a view to promoting the best interests of its own citizens.

Senator CLARK. The only difficulty it would make is that the States generally might differ as to the proper way to protect the interests of the State.

Mr. FISHER. There is, in my opinion, so little likelihood of that in any instance where there has not been, palpably, an attempt to use a local situation for strictly local advantage, that I think it would be a distinct advantage to the entire community if the Federal Government retained its power.

Senator CLARK. There might not be any doubt but what the Federal Government might do a great deal better than the State government and still the State government might consider it had rights of which it was sufficiently jealous that it wanted to exercise them in its own way?

Mr. FISHER. Yes.

Senator CLARK. Now, Senator Works could undoubtedly bring up my children a great deal better than I could. [Laughter.]

Senator WORKS. Thank you.

Senator CLARK. At the same time I might prefer to bring up my children in the way I desired.

Senator THOMAS. Perhaps the time may come when the Federal Government will appoint Senator Works in your stead. [Laughter.]

Mr. FISHER. That does not quite fit this case, though, because you could part with your power to control your children and turn them over to Senator Works, but in this case if the Federal Government does not have power to impinge on what it deems to be the functions of the State, it can not get power by any legislation Congress could enact.

Senator CLARK. The popular idea at present is, and it is in this bill, that if the State Government fails to exercise the right itself, then the Federal Government could step in and operate the service.

Mr. FISHER. I think they can do so and I do not think there is anything in the Constitution that will prevent that. In the first place, the parent will have no complaint. He will merely use Senator Works to raise his children until he gets ready to exercise that function himself. If he does not see fit to educate them the State steps in and concludes to do it. The State can continue until the Federal Government itself acts. And under this act the Federal Government says——

Senator CLARK. Of course, that is a matter of opinion.

Mr. FISHER. No, I am talking about the bill.

Senator CLARK. I know, but you are interpreting the bill.

Mr. FISHER. Oh, yes.

Senator CLARK. I could interpret it that if the State did not want to act to-day, not as conceding the right to the Government to act, but that it has come to the conclusion that the time was not ripe for the State to act, and when the proper time came it would act.

Senator NORRIS. In other words, the theory of the Senator would be he did not want his children raised at all. [Laughter].

Mr. FISHER. He might prefer to let them run wild and not have them under any control at all.

Senator CLARK. The State might think I ought to send them to school when they were one year of age and I might not want to send them to school until they were eight years old, and I think I ought to have that right.

Mr. FISHER. I think in the present state of civilization, Senator, the State does now recognize its authority over and its interest in the education of children, and I think that is true with regard to the development of water powers when they are used for public utilities, or when they are used by a private grantee for private profit.

Senator CLARK. Then right along that line there is a question I would like also to hear you discuss, I ask for my own information, and not in the way of argument at all, Mr. Secretary, and that is this: The laws in our various States that have legislated on the subject at all give preference to the use of water; for instance, a preferred use for irrigation, and then for power, and then for something else. Now, this bill deals only with power rights.

Mr. FISHER. Yes.

Senator CLARK. Now, in case the State has given a preference right for irrigation purpose, is there not a conflict likely to arise and create a good deal of difficulty under a bill of this sort?

Mr. FISHER. I do not think so. It is another one of those cases where it might seem, as a matter of pure theory, that there might be difficulties of that kind arise. As a matter of fact, from such experience and observation as I have had, the only cases in which such conflicts have arisen, are cases in which any disinterested observer who has studied the situation, will, I think, reach the conclusion that the irrigation use that was proposed was purely a cover. I do not know of any instance in my own experience as an official or in examining the records of previous Secretaries, where the uniform practice of the department has not been to recognize irrigation as the superior use, and wherever there was a bona fide demand for any substantial use of water for irrigation, it has been given that preference. Nor can I see any possible objection to putting into this bill a properly guarded declaration of such a preference, provided you do not say that in every instance where water is to be used for irrigation it must be so used, because then its use on 5 acres of land for irrigation would prevent the development of 5,000 horsepower or 50,000 horsepower for power purposes. You must not put it in such shape that the Secretary of the Interior could not exercise any discretion in the matter, because you would defeat the very purpose you have in mind, which is, as I understand it, to protect bona fide irrigation, but not colorable irrigation. As the law now stands it gives much broader rights to a grant for irrigation purposes than it does for one for water power.

I had a number of instances of gentlemen making a great show of a desire to use certain water for irrigation, but on investigation, and especially the investigation of the experts of the Geological Survey, it was demonstrated that the use for irrigation was a mere cover. They simply were trying to get a power right under the more favorable conditions of the irrigation law. You do not want to create that situation.

Senator CLARK. Let me ask you a question right there, and I am not speaking from any knowledge that I have, or from any illustration, but you are speaking of this discretion. Would it not naturally be that where an application is made for a permit the Geological Survey, or whatever bureau would be charged with the examination, would naturally determine, in the first place, as to what was the best use of that power?

Mr. FISHER. Yes; its highest use.

Senator CLARK. Its highest use, yes. And would they not then almost naturally recommend that it be devoted to that purpose and not to any subordinate purpose?

Mr. FISHER. What they do as a matter of practice, in my experience, Senator, is this: They are quite apt to report, and they should report, and if you were Secretary of the Interior you would want them to report, what the highest use of the water is. But they do not stop there. I think the Geological Survey is just as keenly alive to, and just as sensitive to, the fundamental reasons, from the standpoint of public policy, for preferring irrigation to power, as anybody else, as members of the United States Senate, or a Member of the Cabinet, and it has gone on, in all instances of which I have knowledge, to point out that where the proposed use in a given case is a substantial irrigation use, and that while it will not bring the same development that might be produced if it was devoted to power uses, they nevertheless say that the irrigation use is substantial, and they recommend that a permit be given to the irrigation applicant. But there are cases of exactly the opposite kind, where there are persistent applications for irrigation, and where I am sure you would agree at once it was clearly an attempt to get a power permit under the irrigation law, and the Survey should report to that effect, and the Secretary should deny the application.

Senator WORKS. I have suggested here two or three times the question of the advisability of granting these permits or leases for the exclusive purpose of developing power. In that way, of course, you necessarily take away from the State any right or authority to compel the water to be used for both power and irrigation.

Now, do you not think it would be wise to include some provision in the bill that would authorize the joint use of the water, stored, for example, in some reservoir, as it can be, and frequently is, used for two purposes?

Mr. FISHER. If a provision of that sort could be carefully drafted I would see no objection to it. However, as the law now stands preference is given for irrigation purposes. At least that is true in my experience. Under the present law applying to irrigation permits they have the right to develop incidental power. If it is really an irrigation project they come in and make application under the irrigation law. If incidental power is developed, that does not defeat the application and it is granted.

Senator WORKS. No; but this bill only authorizes the granting of a lease for a specific purpose.

Mr. FISHER. Yes.

Senator WORKS. For an exclusive purpose?

Mr. FISHER. Yes.

Senator WORKS. Now, I do not know of any way under any of the laws of that kind in which you can compel the use of this plant or the site for the purpose of furnishing water for irrigation.

Mr. FISHER. I can see no objection to a provision in this bill that the Secretary could grant permits under this act for a combined use for irrigation and power if, in his judgment, the case was one in which it was proper to do so. I do not see any objection to that. I think that is the effect of having the two statutes on the two subjects now, but if it would remove any doubt I can see no objection to a properly worded provision in this bill which would authorize the Secretary to grant permits for joint use.

Senator WORKS. I do not see very well how you could take that position where, under this proposed statute, the grant would be exclusive.

Mr. FISHER. Well, you see this act would not have any effect at all upon that matter, Senator, except where this permit was one for a storage reservoir. The operators under the permit get no right to use the water except for power, under this statute. Now the water, after it has passed through the wheel, is available to anybody, and it can be used for irrigation.

Senator WORKS. Oh, yes; the water would be turned back into the stream and it would not interfere at all with the use of the water for irrigation purposes below, but I am talking about the use of the site itself, which may include the reservoir site used for the storage of water.

Mr. FISHER. There might be a case where a reservoir site would be involved, and if the application was not made under the present law applicable to irrigation permits I assume there could be some such provision as you speak of.

Senator WORKS. Going back to the law of California, we have now what is called the water commission, and that commission has a right to determine the uses to which the water should be put, and can be or should be used for any given purpose, and certainly a law of this kind would interfere with that power very materially.

Mr. FISHER. I do not think it would work out so, but if you have any apprehension about it, some such provision as you suggest could be put in the bill. I certainly agree with you in the policy. I think, in the first place, irrigation is the highest use, and, in the second place, if you can use the same water for power purposes it should be so used.

Senator ROBINSON. You would have great difficulty in preparing a provision of that kind unless you leave it in the discretion of the Secretary.

Senator WORKS. That may be, but it certainly seems to me that something ought to be done that will prevent its being used exclusively for one purpose.

Mr. FISHER. I want to say that the only thing which the men connected with water power, who have seemed to me to be most far-sighted about this thing—and certainly they represent very large interests—say about it is that there should be flexibility in any statute and the Secretary should have wide discretion; that is, from their point of view, because they point out that in the present state of the art and with the widely varying conditions applicable to the water-power situation over the country that a general rule must work hardship one way or the other. It must fail to protect the

public or it must be unduly harsh on the power interests. They have always insisted that the one thing they wanted, on the whole, was liberal discretion in the Secretary.

Senator ROBINSON. Mr. Secretary, one of the primary objections to the bill that has been urged in this hearing is that it vests too much discretion in the Secretary of the Interior, that the bill is not specific enough. I remember distinctly a number of the witnesses have urged that as the reason why they would be unable to finance operations under this bill, that it invests too much discretion in the Secretary. I am not expressing my own individual opinion, you understand, but that was the reason I asked the question, because a large number of witnesses who have appeared during this hearing have urged that objection and have urged it persistently.

Mr. FISHER. I suppose that the most important power development for which provision has been made in the United States in the last few years is the project for the electrification of 400 miles of the Chicago, Milwaukee & St. Paul Railway.

The permit for the Milwaukee development was issued by me. It is one of those electrifications that have been mentioned here. I was assured at the time that they could not turn a wheel toward its development unless I did give them a permit; that they were absolutely unwilling to make a contract between the power company and the railroad unless I gave them a permit.

The president of that company, Mr. Ryan, who is connected with the Amalgamated Power Co. and certainly in a position to protect himself, stated, not only privately but publicly, that nothing had been asked of him by the permit issued by the department that was not right. He wrote me letters and he came to see me, and he told me that he thought it was the most important step that had been taken toward water-power development and that it was along right lines.

Senator THOMAS. I think it is now contended, Mr. Secretary, that this bill is essential, and some of the amendments as suggested are essential, to make that particular project available and sufficiently productive to interest capital.

Mr. FISHER. That could hardly be. We made it a condition of the grant or permit that the contract should be made between the railroad company and the power people, and it is made, and unless one or the other is going to give up some advantage under it I do not just exactly see how it is going to be modified.

Senator THOMAS. I do not mean that the contention has been made before this committee, but I have heard the statement several times in connection with this bill.

Mr. FISHER. I doubt if there is anything in it at all. I do not know. I think Mr. Mitchell has some connection with that matter.

Senator ROBINSON. The statement has been made here by a number of gentlemen that investors would insist upon specific provisions of law and not regulations fixed at the discretion of the Secretary of the Interior concerning those matters; and that if that were not done investments would not be made in these operations, and there would be no development of them. I recall that statement; I recall the names of a number of witnesses who have stated that, and stated it repeatedly during the course of this hearing. But, on the other hand, it was disclosed that some restrictions were placed in

laws made by neighboring governments, by the Canadian Government, under the same circumstances; and there was a difference of opinion as to whether development had proceeded rapidly under it or not; but some say it has.

Mr. FISHER. I wish you would get the facts. You have had Mr. Challies here, and that ought to have been gone into. He certainly could furnish you that information.

Senator ROBINSON. It was gone into.

Mr. FISHER. I suppose there has not been in the entire world an electric development, from a public point of view, that is comparable to the electric development in the Province of Ontario.

Senator ROBINSON. I do not mean there was any doubt in Mr. Challies's mind that there had been development, because he said there had been development as rapid as the demand would warrant.

Senator SMOOT The Province of Ontario has nothing in common. as to its laws concerning water power, with us

Mr FISHER I think it has, Senator

Senator SMOOT. The Dominion has no power over the water powers in Ontario.

Mr. FISHER. Certainly not; but the general principles that we are talking about here are in the Canadian and the provincial laws and regulations.

Senator WORKS. Ontario has developed her water powers and her lands just as California would develop hers.

Senator SMOOT. Or as Utah would develop hers.

Senator WORKS. Without any supervision by the general Government.

Mr. FISHER. But, Senator, with the solitary exception of this one question as to the supposed different interests of the State and Federal Governments, all those principles are exactly the same. A water-power permit is issued there by Ontario, or the Dominion, as it is by the State of California or the Federal Government in this country.

Senator WORKS. Certainly; that is true.

Mr. FISHER. Those are the principles or provisions these men are pointing out as retarding development. Their complaint is of those things that they say ought not to be in the grant or permit, and not that it comes from the State or Federal Government.

I do not like to prophesy, but I am going to undertake it in this instance, and I predict that in the history of this development you will have exactly the same experience you have had in regard to railroads. You will find, as you did in the case of the railroads, that there will be people who will complain that the Federal Government is injuring these enterprises by interfering with the States, and then it will only be a little while until you will find these same gentlemen piling into this chamber here, into the Capitol at Washington, pointing out that the only way they can be saved is for the Federal Government to exercise its jurisdiction to the fullest possible extent.

I served, as you know, as one of the Railway Securities Commission, of which President Hadley was chairman, and we consulted many of the leading railroad men and principal investors in this country, and they were practically unanimous upon the proposition. They all felt that it was not a question of theory, but that it was a condition that confronted us, and there was only one question, namely, How are you going to effectively regulate a condition of that kind, first, in

the public interest and, second, in the private interest, which is identical with the public interest in the long run, in so far as it is a legitimate private interest? They said, "You can not get two States to agree. Theoretically you ought to be able to get two States to sit down together and agree upon a common policy, but practically you can not do it." You know what the situation is in Nebraska. Take the development of water in Nebraska as between Nebraska and Wyoming. That has only been carried along because of the fact that Senator Warren has been reasonable in his demands on the one side, and the Senators from Nebraska have been reasonable in their demands on the other side, that they have been able to work out an adjustment of their water difficulties. There is a case where the State of Wyoming, if it controls all the waters within its borders and if it wanted to do so, could take the waters out of the river to the absolute destruction of all the projects lower down in Nebraska.

We have exactly that situation in Colorado, where the Federal Government itself, in an adjustment of an international difficulty with Mexico, made an appropriation of a million dollars to carry out a project in the State of Texas, where there were no public lands, and the State of Colorado, looking at its local interests, insisted that it can not be deprived of the water necessary for that project.

Senator THOMAS. We have been deprived of it just the same.

Mr. FISHER. Certainly you have; and I was one of those instrumental in depriving you of it, Senator.

Senator THOMAS. There is no doubt of it, and every Secretary before you has contributed to it.

Mr. FISHER. But, Senator——

Senator THOMAS (interposing). And in direct violation of our rights as a State under our constitution.

Mr. FISHER. The only decision you were able to get from the courts is against that contention.

Senator THOMAS. On the contrary, we have been denied an appeal to the courts of appeals by your predecessors.

Mr. FISHER. Oh, no.

Senator THOMAS. Yes. I know what I am talking about there.

Mr. FISHER. The State would like to have the Federal Government go into court in a way that would put the Federal Government at a disadvantage in the litigation.

Senator THOMAS. We have asked the Federal Government to fix its own terms.

I want to say that if this bill passes with my consent it will contain some provision whereby we can secure at least the right to take our claims in that particular matter into court, or I will be carried out feet foremost.

Mr. FISHER. I have no quarrel with the State of Colorado. This is the situation, and it illustrates what will happen, and it bears directly on this bill: The Rio Grande River is an interstate stream. Now, the Federal Government, in adjusting an international dispute with Mexico, did, as a matter of fact——

Senator THOMAS (interposing). There was no dispute. The Attorney General of the United States declared in his opinion, in presenting it to the Secretary of State, that there was no dispute absolutely, and that opinion has been ignored by the Government of the United States from the very hour that it was pronounced up

to this day, and the dispute was recognized notwithstanding that fact, and your international treaty followed, all at the expense of the people of my State.

Mr. FISHER. Let us assume that was all true. The Attorney General thought there was not a dispute; Congress thought there was, and ratified an international agreement with the Government of Mexico and, as a result of that, it provided for an irrigation project in Texas, and since that irrigation depends on getting water out of the Rio Grande River, a part of which water originates in the State of Colorado——

Senator THOMAS (interposing). Yes, and that enterprise is now being conducted and has been ever since its inception as a reclamation project, and the reclamation funds of the Government are being used for the purpose of reclaiming 13,000 and some odd acres of the public land and something like 170,000 acres of private land, all at the expense of $10,000,000 of the reclamation funds for the ostensible purpose of enabling the Government to give to the citizens of Mexico annually 60,000 acre-feet of water, and by which we are deprived of the right to use in our State the waters of the Rio Grande River and its tributaries, notwithstanding the grant from the Government. That is the situation.

Mr. FISHER. I do not intend to controvert that statement in any way, but that was not involved.

Senator THOMAS. I did not intend to mention it until you mentioned it yourself; then I wanted to develop it a little further.

Mr. FISHER. Assuming that is true, Congress has acted, and a million dollars was appropriated out of the national funds and the project started before my time; but even if that be true, the fact remains that we can not get Texas and Colorado together, and we must settle this matter.

Senator THOMAS. I have been trying to get them together ever since I have been here. I am the only one who has manifested any such disposition, however. [Laughter.]

Mr. FISHER. I suggested that the President of the United States and the governors of Colorado and Texas together appoint a commission to find out whether there was not water enough for all. If there was, we would not have any quarrel. But I could not bring about any agreement.

Senator THOMAS. The President was perfectly willing to arbitrate it provided he could appoint the arbitrators.

Mr. FISHER. That may be the reason no practical method has been adopted to get rid of that matter amicably. The States have not been able to get together; the State represented by Senator Thomas has not been able to get together with Texas or with the Federal Government to settle their difficulties, and I only cite such matters here because it illustrates the fact that in interstate matters we can not rely upon voluntary adjustment of those matters between the States. When you have in fact got something of an interstate character, no matter whether it is the transmission of hydroelectric energy or whatnot, in the general public interest, including the interest of the particular States concerned, it is vital that the Federal Government shall retain all of the control it has and leave the wisdom and expediency of its exercise and the manner in which it shall be exercised to be determined in the particular case. That is one of the

reasons why I think it would be a great mistake to abandon in any way what authority the Federal Government has.

In that connection, let me refer just a moment again to this same report of the State engineer of Oregon, from which I was reading a little while ago. I read from page 156:

It is believed that the construction of both irrigation and power projects on a large scale can be brought about more quickly through such a plan of cooperation than by each State acting apart from the Federal Government. It is believed that by this plan of cooperation the friction which now exists between those favoring State control and those favoring national control will soon die out.

Now, that is the expression of opinion of a man who is actually engaged in the business of handling this particular matter, and the particular phase of it which relates to the supposed conflict between State and Nation.

Now I want to, if I may, refer back just a moment to what I said about the ability to get the private and public interests together, when you can get them to sit down and consider the matter dispassionately and really express their views. And I want to call your attention, in that connection, to a report which was made before the National Conservation Congress on water power, if I can put my hands on it.

At the session of the National Conservation Congress, held in this city on November 18, 19, and 20, 1913, the water-power question was given a great deal of attention, as some of you know, and a very considerable committee was appointed on that subject, which devoted a great deal of time prior to the meeting of the congress, to preparing a report. There were two reports prepared. There was a difference on the one side and the other on the question of the character of the report, the extreme advocates on the one side being lined up on the one hand, and the other disagreeing. But the committee got together and agreed upon a unanimous report upon certain things as to which they were, in fact, unanimous. It is not my intention at all to enter into the controverted phases of the matter. I do not care to discuss the minority report nor the majority report. But it does seem to me it is worth while to call your attention to a report which was agreed upon by such men as George F. Swain, of Boston, who, as you know, is a man of high standing and entirely friendly and in sympathy with and acquainted with the point of view of the large developers of power—Mr. Gifford Pinchot; Hon. Henry L. Stimson; Louis B. Stillwell, also largely interested in power development; Charles R. Van Hise; M. O. Leighton, formerly connected with the Geological Survey, but serving now as consulting engineer in these matters; Mr. E. S. Webster, and Mr. B. M. Hall. Those gentlemen agreed upon a report, in which they said:

We recommend that the following principles should govern the granting of a privilege to use a water power:

(a) For a definite period, sufficient to be financially attractive to investors, the privilege should be irrevocable except for cause, reviewable by the courts.

(b) Thereafter the privilege should continue subject to revocation in the absolute discretion of the Government exercised through its administrative board or officer upon giving reasonable notice and upon payment of the value of the physical property and improvements of the grantee as below provided under (h).

(c) After the expiration of the period provided for in (a) above, at recurring intervals of not more than 10 years, the amount of compensation to be paid to the Government for the privilege and all the terms and conditions of the grant during the next succeeding period of not more than 10 years shall automatically come up for determination by the granting officer of the Government.

(*d*) The privilege shall be unassignable except with the approval of the Government in order to safeguard the interests of the Government against speculation in water powers and against appropriation without prompt development.

(*e*) The privilege shall be granted only on condition of development of the whole capacity of the water site as rapidly as the granting officer may from time to time require, giving due consideration to reasonable market demands and conditions and also on condition of continuous operation, subject to such demands and conditions.

(*f*) The right to receive compensation for the value of the privilege varying according to the proper conditions of each case shall be reserved to the Government, State or Federal, from whom the privilege comes. We believe that the reservation of such a right to compensation is a vital essential toward the end of proper regulation. It is not sufficient to trust that the public will always receive its proper share by means of regulation of rates alone. Local authorities may neglect or may be unable, under conflict of jurisdiction, or for other reasons, to exact in the interest of the public the full value of the public's right. The value of a water power may in the course of time increase far beyond the power of regulation to adequately distribute its benefits At the same time, the method of exacting compensation must be carefully safeguarded so that in case full compensation by rate regulation is exacted by local authorities, an additional burden shall not be imposed. We believe that in normal cases the best method is for the Government to share increasingly in the net profits of the enterprise, provided, those profits exceed a certain reasonable percentage, the right of the Government being recognized otherwise merely by the imposition of a small annual fee or its equivalent.

(*g*) The Government shall have the right to prescribe uniform methods of accounting for the grantee and to inspect its books and records.

(*h*) Upon revocation of a privilege by the Government the grantee shall be paid a compensation equivalent to the fair valuation of its property, exclusive of franchise and consequental damages; this compensation shall include such appurtenances as are necessary for the operation of the water power and the transmission of electricity therefrom but shall not include such properties as railroads, lighting systems, factories, etc., which are of themselves separate industries.

In such transfer all contracts for the sale or delivery of power made in good faith previous to such notice of transfer should be assumed by the transferee so that the said grantee may operate and maintain the power business during his occupancy of the property under such stable guarantees as may beget confidence therein by prospective long term contractors, provided, that the Government or said transferee shall not assume any contracts made at a price or under conditions which shall be determined by the proper administrative officer of the Government to be unreasonable or confiscatory.

Now, that is a declaration of principles applicable to any grant, signed by the advocates on both sides. That is to say, it was signed by men like Mr. Gifford Pinchot, we will say, upon the one hand, who has been an ardent advocate of the conservation theories, as they have been called, and by men like Mr. Stillwell and others, who are directly concerned in the private development of these very water powers, and I commend it to your consideration as the sort of thing that the power people will agree to as appropriate when you can get them to consider the matter in a dispassionate manner, where they are not attempting to get legislation, and that legislation as favorable to them as they possibly can persuade Congress to make it. Of course they have a perfect right to urge their side of these matters with a view of having them just as favorable as they can.

But the thing you want to know is what they really think down in their hearts are the proper things to provide in the public interest and in their own interest, and you learn that out of such documents as this better than you will from testimony during a controversial consideration of the matter.

In that connection I commend to your consideration the testimony of Mr. Newcomb before the National Waterways Commission, and the testimony of Mr. Cooper before your committee here. Those are things which I think should be given great weight.

Now, I want to call your attention to one other matter in connection with this exaction of compensation. Of course it is perfectly clear that if the right to a power site is granted to a grantee who uses that power for his own manufacturing purposes, or who sells it solely to some subsidiary company or companies, public regulation does not touch it at all. Regulation, whether it is State or Federal, touches absolutely nothing that is not in the nature of a public utility. If the grantee himself uses the power leased to him and is thereby enabled to manufacture his product, whatever it may be, whether nitrates, to which reference has been made before you, or whatever it may be, the price that he puts on the nitrates or other product will be controlled solely by his own enlightened selfishness. In the first place his effort will be, so long as he can not combine with other people to control prices, to cut under his competitor just enough to get the business. He may go further than that; he may lower his price in order to increase his sales with the idea in mind that the increased sales will more than make up for the diminution in price. His action, however, will have nothing to do with the question of compensation. It will have nothing to do with the value of the water power, to him or the public. He will use it to his own profit. The price of his commodity will be regulated and controlled solely by a consideration of the money he can make out of it.

Senator NORRIS. With him it is a question only of profit to himself?

Mr. FISHER. Of course. It must be so.

Senator NORRIS. Certainly.

Mr. FISHER. That is what will control, and the question of whether there is Federal regulation or State regulation will have no application to it whatever.

Senator THOMAS. Will it not have some application in the event of excessive capitalization?

Mr. FISHER. Unless you change your laws, it will not. We have no laws now which adequately cover excessive capitalization of manufacturing companies. There may be a development in the future which will regulate capitalization of all companies, whatever their nature. There may be, of course, a provision that they shall not capitalize for more than they have got. But there is nothing in the law which will prevent that capitalization increasing. You grant a power site to-day, and in the course of time it is worth double what it is to-day.

Senator THOMAS. There is such a thing as capitalization of the future.

Mr. FISHER. They will either have an appraisal and have a stock dividend, or they will sell it to one company or another, and that company will get the value of the property into an increased capitalization; and under our present laws, in many instances they try to add something they should not.

Senator THOMAS. That condition of things, I think, will inevitably be regulated so as not in the least degree to affect the price of the commodity.

Mr. FISHER. Whenever we are ready to go into regulation by the Government of all commodities——

Senator THOMAS (interposing). Oh, no, I do not mean that at all.

Mr. FISHER (continuing). I do not think it would.

Senator THOMAS. The idea I wanted to convey was that the excessive capitalization can find the hope of reward of profit only in doing a business sufficiently large or by the imposition of prices sufficiently large to produce a profit first upon the actual capital and second upon the water.

Mr. FISHER. Oh, yes.

Senator THOMAS. A condition which is being followed in my State, for instance, to-day by the beet-sugar company.

Mr. FISHER. Those influences are at work, undoubtedly. But they would not apply to a power grant in any effective way that I can see. When you grant a power site to a private grantee, and he pays nothing, and it is worth a million dollars, let us say, by way of illustration—whatever it may be worth—that will not reduce his price beyond the point that it is to his own selfish interest to reduce them for other considerations. Your State public service commissions will not touch it, because it is not a public utility.

Senator NORRIS. In this bill, of course, there would be some regulation in regard to the charge.

Mr. FISHER. Oh, yes; if you pass this bill.

Senator NORRIS. The Secretary of the Interior would regulate it by the price he would fix.

Mr. FISHER. True. But there is another consideration aside from the regulation by the Federal Government. It is a fact that there are very few potential or developed water powers in the United States to-day, in the West, at least, that the Federal Government is not called upon to make very substantial expenditures to protect and develop; and it ought to be so called upon. The truth of the matter is that more and more all of the States are looking to the Federal Government to protect and develop water, both for power and all other purposes. The provisions of the appropriation bills show it, and no matter what reforms may be introduced in them, the probabilities are that the uses of water for all purposes will be one of those things for which the Federal Government will expend Federal moneys and will be called upon increasingly by the local representatives of the States to do so.

Senator THOMAS. I think that is true as to every department of life; that States are more and more dependent upon, or calling upon the Federal Government for it.

Mr. FISHER. It is particularly true of water power, because many of those water powers fit into things over which the Federal Government has control. Take your Appalachian bill, for instance. It is frequently asked, Why should not the Western States be treated like the Eastern States? The Eastern States did not have any public land at all. Take the Middle States, however, like my own State of Illinois. I want to assure you that my State, Illinois, is exceedingly regretful that this sort of a bill was not passed before. We are engaged in very active litigation between the State and certain gentlemen who have acquired most valuable power properties, and the result of the decisions has been that the private interests have gotten in and gotten in in such a shape that it will probably destroy our ability to finance our portion of the lakes and gulf waterway in the way we had planned, which was to pay for it out of the sale of power. I might say that in the course of a few years we would have gotten back the initial investment and have had a great revenue

[illegible] and We have lost it. We are sorry Congress [illegible]. We would not have complained that we were [illegible]. We regret that we were not deprived of the [illegible] away.

Senator THOMAS. It was given away by the Federal authority, [illegible] Federal law?

Mr. FISHER. It was given away by both. Somewhere in that [illegible] zone between the State and Nation we lost it.

Senator THOMAS. The loss of nearly all of the rest of the natural resources of the public land States has been through the agency of Federal law and Federal administration.

Mr. FISHER. This was not public land.

Senator THOMAS. It may not have been public land, and I do not [illegible], but the Government of the United States could have protected it.

Mr. FISHER. I will tell you how it did it, as I understand it. [illegible] private company acquired riparian rights on the banks of a stream [illegible] which navigation was questionable. When it got down to the [illegible] of that fact, at this period of time and under the present application of the law to it, the lower court, and finally the Supreme Court [illegible] United States, held that it was not in fact navigable, and therefore the Federal Government had no authority, and when under our [illegible] riparian owner acquired the banks of the stream and actually [illegible] a dam he acquired control over it, so that we can not touch [illegible] at all. We want to go in and develop that stream by the expenditure of public money. We want to expend millions of dollars [illegible] a waterway on which the riparian owner will reap a profit. [illegible] who owns that right says, "You can go ahead and develop [illegible] when you develop it and increase our water power many times [illegible] going to reap the benefit of it."

[illegible] THOMAS. When you say that public moneys will be expended, what do you mean—State moneys?

[illegible]. The State.

[illegible] THOMAS. What is to prevent the State from exercising the [illegible] eminent domain?

[illegible]. It can, but it will have to pay [illegible] to pay for this unearned increment [illegible] make impossible.

[illegible] THOMAS. Of course you are aware of [illegible] in recent years [illegible]

[illegible]

[illegible]

[illegible] Secre-
[illegible] nd per-
[illegible] A jury
[illegible] of all the

Senator SMOOT After reading that part, I would like to have the whole decision put in, because I believe there is a dispute as to what that decision really is.

Mr. FISHER. If anybody on the other side of this question can get any comfort out of the Chandler-Dunbar case he is welcome to it.

Senator THOMAS. You mean anybody who questions the extent to which it goes?

Senator SMOOT. When you say "the other side" of course I do not know what you mean by that.

Mr. FISHER. I mean the side that insists that where a private owner has acquired land on the edge of a navigable stream he thereby acquires a vested right to develop a water power of which the public can not deprive him.

Senator THOMAS. I think the case goes almost as far, but not quite as far as you contend. At the same time, I regard it as a reversal of the hitherto accepted doctrine, as far as the ownership of the sovereignty in water is concerned.

Mr. FISHER. There is a difference of opinion in that. I have always been of the opposite opinion.

Senator THOMAS. I merely state my conclusion upon previous decisions of the Supreme Court of the United States and the common law which we inherited from Great Britain.

Mr. FISHER. I do not believe in saying, "I told you so," or anything of that sort, and lawyers of eminence disagreed about it.

Senator THOMAS. I confess, at the age of 65, I am rapidly reaching the conclusion that all of my previous conceptions of the law have been overthrown, not only as to this question, but as to a great many others. I have recently been able to find authorities in support of both sides and every side of every conceivable human controversy that has come within my experience.

Mr. FISHER. Senator Smoot, this is the part of the decision to which I referred:

> The technical title of the Chandler-Dunbar Co., therefore, includes the bed of the river opposite its upland on the bank to the middle thread of the stream, being the boundary line at that point between the United States and the Dominion of Canada. Over this bed flows about two-thirds of the volume of water constituting the falls and rapids of the St. Marys River. By reason of that fact and the ownership of the shore the company's claim is that it is the owner of the river and of the inherent power in the falls and rapids, subject only to the public right of navigation. While not denying that this right of navigation is the dominating right, yet the claim is that the United States in the exercise of the power to regulate commerce may not exclude the rights of riparian owners to construct in the river and upon their own submersed lands such appliances as are necessary to control and use the current for commercial purposes, provided only that such structures do not impede or hinder navigation and that the flow of the stream is not so diminished as to leave less than every possible requirement of navigation, present and future.

That is the claim of the private owner

> This claim of a proprietary right in the bed of the stream and in the flow of the stream over that bed to the extent that such flow is in excess of the wants of navigation constitutes the ground upon which the company asserts that a necessary effect of the act of March 3, 1909, and of the judgment of condemnation in the court below is the taking from it of a property right or interest of great value, for which, under the fifth amendment, compensation must be made.
>
> This is the view which was entertained by Circuit Judge Denison in the court below, and is supported by most careful findings of fact and law and an elaborate and able opinion. The question is, therefore, one which from every standpoint deserves careful consideration.

This title of the owner of fast land upon the shore of a navigable river to the bed of the river is at best a qualified one. It is a title which inheres in the ownership of the shore and, unless reserved or excluded by implication, passes with it as a shadow follows a substance, although capable of distinct ownership. It is subordinate to the public right of navigation and however helpful in protecting the owner against the acts of third parties, is of no avail against the exercise of the great and absolute power of Congress over the improvement of navigable rivers. That power of use and control comes from the power to regulate commerce between the States and with foreign nations. It includes navigation, and subjects every navigable river to the control of Congress. All means having some positive relation to the end in view which are not forbidden by some other provision of the Constitution are admissible. If, on the judgment of Congress, the use of the bottom of the river is proper for the purpose of placing therein structures in aid of navigation, it is not thereby taking private property for a public use, for the owner's title was in its very nature subject to that use in the interest of public navigation. If its judgment be that structures placed in the river and upon such submerged land are an obstruction or hindrance to the proper use of the river for purposes of navigation, it may require their removal and forbid the use of the bed of the river by the owner in any way which in its judgment is injurious to the dominant right of navigation. So, also, it may forbid the construction and maintenance of tunnels, etc.

Now I will omit a lot of the decisions.

Senator SMOOT. It seems to me, from what you have read so far, that they do not say that they can assert any right that is not granted to the Government under the Constitution.

Mr. FISHER. No; but they do say what that right is.

Senator SMOOT. And I do not think there is any question about that. I do not see that that covers the question you have discussed before.

Mr. FISHER (reading):

So much of the zone covered by this declaration as consisted of fast land upon the banks of the river, or in islands which were private property, is, of course, to be paid for. But the flow of the stream was in no sense private property, and there is no room for a judicial review of the judgment of Congress that the flow of the river is not in excess of any possible need of navigation, or for a determination that if in excess the riparian owners had any private property right in such excess which must be paid for if they have been excluded from the use of the stream.

Senator THOMAS. As a matter of fact, under that decision, do you not think that the Government, for the apparent purpose of improving navigation, can improve the current of the stream and go into the business of manufacturing and selling power?

Mr. FISHER. It is expressly held that the Government, as you say, could go into the business of manufacturing power.

Senator THOMAS. Yes; that the Government, assuming ostensibly to improve the stream for the purposes of navigation can really improve it for the purpose of hydroelectric energy and go into the business of manufacturing and selling power. I do not see that that is not only a logical but a necessary sequence of the decision.

Mr. FISHER. This is what the court said on that matter:

It is said that the twelfth section of the act of 1909 authorizes the Secretary of War to lease, upon terms agreed upon, any excess of water power which results from the conservation of the flow of the river and the works which the Government may construct. This, it is said, is a taking of private property for commercial uses and not for the improvement of navigation. But, aside from the exclusive public purpose declared by the eleventh section of the act, the twelfth section declares that the conservation of the flow of the river is "primarily for the benefit of navigation and incidentally for the purpose of having the water power developed, either for the direct use of the United States or by lease * * * through the Secretary of War."

If the primary purpose is legitimate, we can see no sound objections to leasing any excess of power over the needs of the Government. The practice is not unusual in respect to similar public works constructed by the State governments.

Senator THOMAS. Precisely. All that the Government has to do is assert its primary purpose to be one thing when it is in fact another, and go right ahead with the business of manufacturing power.

Mr. FISHER. Certainly; and no court can review it; and it is not obnoxious to the Constitution.

Senator THOMAS. That is the logical deduction I make from that decision.

Mr. FISHER. I think you are right, and I do not think it would be possible to have it any more clearly enunciated than it is.

Senator THOMAS. That is what I said, that the Government go one step further than that position and under the pretext of improving a river for the purpose of navigation, they could go into the electric business.

Mr. FISHER. That is, that it has the constitutional right to do so.

Senator THOMAS. Yes.

Mr. FISHER. So I conclude, but whether it should do so is a question to be determined under the particular facts and circumstances. The Canadian Government, or the Ontario Government, as you know, regard this as an almost incalculable public advantage, because they generate their power where they can, and they buy it where they can not generate it. I think they buy most of it. Then they build transmission lines, and they sell that power to municipalities and private consumers in the municipalities throughout the Dominion, with the result of reducing the cost of power, and, in their opinion, greatly benefiting the public. Now, we have got to choose. There is in the West the sentiment that some of these things interfere with development. And sometimes people in the West, I think with the best and most disinterested intentions, feel that because you are interfering with the financial profits of the people who take over these power projects, that that is hindering development. I think those people fail to recognize how much more important it is that the people of those States should get cheap power. Nothing can have more effect, in my judgment, upon the whole industrial and sociological development of the entire country, including the people of the West, than to be able to deliver to the individual consumer power at the lowest possible rate. And nothing will better enable the smaller manufacturer to compete with the larger manufacturer. By cooperation in the purchase of materials and in the sale of the manufactured products there are many lines of manufacture that could be carried on in an exceedingly profitable way by a very small manufacturer, provided you can carry the power necessary to operate his tools or machine right into his house or little shop. And I think that will be of far greater advantage to the communities of the West than any possible advantage that may come from large profits that will accrue to a very few people by the establishing of a great enterprise.

Senator NORRIS. Before you leave this subject, I would like to inquire of the chairman whether the whole opinion in the Chandler-Dunbar case is going to be put into the record.

The CHAIRMAN. Yes; let it go in.

(The opinion referred to is as follows:)

SUPREME COURT OF THE UNITED STATES.

Nos. 783, 784, 785, and 786.—October term, 1912.

783. The United States, plaintiff in error, *v.* The Chandler-Dunbar Water Power Co. et al.
784. The Chandler-Dunbar Water Power Co., plaintiff in error, *v.* The United States.
785. St. Marys Power Co., plaintiff in error, *v.* The United States.
786. Clarence M. Brown, sole receiver of the Michigan Lake Superior Power Co., plaintiff in error, *v.* The United States.

In error to the District Court of the United States for the Western District of Michigan.

[May 26, 1913.]

These writs of error are for the purpose of reviewing a judgment in a condemnation proceeding instituted by the United States under the eleventh section of an act of Congress of March 3, 1909, being chapter 264, 35 Statutes, pages 815, 820. The section referred to is set out in the margin.[1]

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[1] SEC. 11. That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present Saint Marys Falls Ship Canal throughout its entire length and lying between said ship canal and the international boundary line at Sault Sainte Marie, in the State of Michigan, is necessary for the purposes of navigation of said waters and the waters connected therewith.

The Secretary of War is hereby directed to take proceedings immediately for the acquisition, by condemnation or otherwise, of all of said lands and property of every kind and description in fee simple absolute. He shall proceed in such taking by filing in the office of the register of deeds of Chippewa County, in the State of Michigan, a writing, stating the purposes for which the same is taken under the provisions of this section, and giving a full description of all the lands and property of every kind and description thus to be taken. After the filing of said writing, and ten days after publication thereof in one or more newspapers in the city of Sault Sainte Marie, in the State of Michigan, the United States shall be entitled to and shall take immediate possession of the property described, and may at once proceed with such public works thereon as have been authorized by Congress for the uses of navigation.

The Circuit Court of the United States for the Western District of Michigan is hereby given exclusive jurisdiction to hear condemnation proceedings and to determine what compensation shall be awarded for property taken under authority of this section. After the taking of any property by the Government of the United States, as herein provided for, the United States, by its proper officials, shall begin condemnation proceedings in the aforesaid court, and the practice shall be in accordance with the practice in the courts of the State of Michigan for the condemnation of lands by the State so far as the same may be followed without conflicting with the provisions hereof. Possession may be taken by the United States prior to a determination by a court of any necessity of taking and prior to any determination of the amount of compensation.

Any money payable by the Government under the provisions of this section shall be payable out of any money heretofore authorized or appropriated for the purpose of improving Saint Marys River at the Falls, Michigan.

All that part of "An act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes," approved March second, nineteen hundred and seven, beginning with the words "and all lands and waters north of the present Saint Marys Falls Ship Canal throughout its length," and ending with the words "to comply with the provisions of the river and harbor act of nineteen hundred and two, but such lands, if so acquired, shall be obtained without expense to the United States," is hereby repealed.

Every permit, license, or authority of every kind, nature, and description heretofore issued or granted by the United States, or any official thereof, to the Chandler-Dunbar Water Power Company, the Edison-Sault Light and Power Company, the Edison-Sault Electric Company, or the Saint Marys Power Company, shall cease and determine and become null and void on January first, nineteen hundred and eleven, and the Secretary of War is hereby authorized and instructed to revoke, cancel, and annul every such permit, license, or authority, to take effect on January first, nineteen hundred and eleven.

The Secretary of War may, in his discretion, permit the Chandler-Dunbar Water Power Company and the Edison-Sault Electric Company to maintain their present works and utilize the water power in said river at said rapids, in so far as the same does not interfere with navigation or retard the construction of Government works in said river, under such rules or regulations as have been or hereafter shall be imposed by the Secretary of War, until they shall be paid the compensation awarded by the court for their property condemned under the provisions of this section; but said permit shall not extend beyond January first, nineteen hundred and eleven.

The President of the United States is respectfully requested to open negotiations with the Government of Great Britain for the purpose of effectually providing, by suitable treaty with said Government, for maintaining ample water levels for the uses of navigation in the Great Lakes and the waters connected therewith, by the construction of such controlling and remedial works in the connecting rivers and channels of said lakes as may be agreed upon by the said Governments under the provisions of said treaty.

The Secretary of War is further authorized and instructed to cause to be made a preliminary examination and survey to ascertain and determine a proper plan and the probable expense for constructing in the vicinity of the Saint Marys River a filling or forebay, from which the ship locks shall be filled: *Provided*, That said survey shall in no way delay or interfere with the plans for construction already under way.

The notice of condemnation required by the statute was duly given by the Secretary of War, and this proceeding was instituted against all the corporations and persons supposed to have any interest in the property sought to be condemned. A jury was waived and the evidence submitted to the court, which, at the request of all the parties, made specific findings of fact and law.

By an agreement, the property of the International Bridge Co. required by the Government was acquired by deed, and later in the progress of the case the property of the Edison-Sault Electric Co. involved in the proceeding was acquired by stipulation. This eliminates from the cases every question except those arising in respect of the compensation to be awarded to the Chandler-Dunbar Water Power Co., the St. Marys Power Co., and Clarence M. Brown, receiver of the Michigan Lake Superior Power Co. The final judgment of the court was:

1. That the ownership in fee simple absolute by the United States of all lands and property of every kind and description north of the present St. Marys Falls Ship Canal, throughout its entire length and lying between the said ship canal and the international line at Sault St. Marie, in the State of Michigan, was necessary for the purposes of navigation of said waters and the waters connected therewith as declared by the act of March 3, 1909.

The compensation awarded was as follows:

(*a*) To the Chandler-Dunbar Co., $652,332. Of this $550,000 was the estimated value of the water power.

(*b*) To the St. Marys Falls Power Co., $21,000.

(*c*) To the Edison-Sault Electric Co., $300,000, which has, however, been settled by stipulation.

(*d*) To the Michigan Lake Superior Power Co., nothing.

From these awards the Government, the Chandler-Dunbar Co., the St. Marys Falls Power Co., and the Michigan Lake Superior Power Co. have sued out writs of error.

The errors assigned by the United States challenge the allowance of any compensation whatever on account of any water-power right claimed by any of the owners of the condemned upland, and also the principles adopted by the district court for the valuation of the upland taken. The several corporations who have sued out writs of error complain of the inadequacy of the award on account of water power claimed to have been taken, and also the of valuation placed upon the several parcels of upland condemned.

The errors assigned by the United States deny that any water power in which the defendants below had any private property right has been taken, and also deny the claim that riparian owners must be compensated for exclusion from the use of the water power inherent in the falls and rapids of the St. Marys River, whether the flow of the river be larger than the needs of navigation or not. The award of $550,000 on account of the claim of the Chandler-Dunbar Co. to the undeveloped water power of the river at the St. Marys Rapids in excess of the supposed requirements of navigation constitutes the prime question in the case, and its importance is increased by the contention of that company that the assessment of damages on that account is grossly inadequate and should have been $3,450,000.

Each of the several plaintiffs in error also challenge the awards made on account of the several parcels of upland taken—the Government insisting that the awards are excessive, and the owners, that they are inadequate.

(Mr. Justice Lurton, after making the foregoing statement, delivered the opinion of the court:)

From the foregoing it will be seen that the controlling questions are, first, whether the Chandler-Dunbar Co. has any private property in the water-power capacity of the rapids and falls of the St Marys River which has been "taken," and for which compensation must be made under the fifth amendment to the Constitution; and, second, if so, what is the extent of its water-power right and how shall the compensation be measured?

That compensation must be made for the upland taken is not disputable. The measure of compensation may in a degree turn upon the relation of that species of property to the alleged water-power rights claimed by the Chandler-Dunbar Co. We therefore pass for the present the errors assigned which concern the awards made for such upland.

The technical title to the beds of the navigable rivers of the United States is either in the States in which the rivers are situated or in the owners of the land bordering upon such rivers. Whether in one or the other is a question of local law. (Shively v. Bowlby, 152 U. S., 1, 31; Philadelphia Co. v. Stimson, 223 U. S., 605, 624, 632, Scott v. Lattig, 227 U. S., 229.) Upon the admission of the State of Michigan into the Union the bed of the St. Marys River passed to the State, and under the law of that State the conveyance of a tract of land upon a navigable river carries the title to the middle thread. (Webber v. The Pere Marquette, etc., 62 Mich., 626, Scranton v. Wheeler, 179 U. S., 141, 163; United States v. Chandler-Dunbar Water Power Co., 209 U. S., 447.)

The technical title of the Chandler Dunbar Co., therefore, includes the bed of the river opposite its upland on the bank to the middle thread of the stream, being the

boundary line at that point between the United States and the Dominion of Canada. Over this bed flows about two-thirds of the volume of water constituting the falls and rapids of the St. Marys River. By reason of that fact and the ownership of the shore the company's claim is that it is the owner of the river and of the inherent power in the falls and rapids, subject only to the public right of navigation. While not denying that this right of navigation is the dominating right, yet the claim is that the United States, in the exercise of the power to regulate commerce, may not exclude the rights of riparian owners to construct in the river and upon their own submerged lands such appliances as are necessary to control and use the current for commercial purposes, provided only that such structures do not impede or hinder navigation, and that the flow of the stream is not so diminished as to leave less than every possible requirement of navigation, present and future. This claim of a proprietary right in the bed of the river and in the flow of the stream over that bed to the extent that such flow is in excess of the wants of navigation constitutes the ground upon which the company asserts that a necessary effect of the act of March 3, 1909, and of the judgment of condemnation in the court below, is a taking from it of a property right or interest of great value, for which, under the fifth amendment, compensation must be made.

This is the view which was entertained by Circuit Judge Dennison in the court below and is supported by most careful findings of fact and law and an elaborate and able opinion. The question is, therefore, one which from every standpoint deserves careful consideration.

This title of the owner of fast land upon the shore of a navigable river to the bed of the river is at best a qualified one. It is a title which inheres in the ownership of the shore and, unless reserved or excluded by implication, passed with it as a shadow follows a substance, although capable of distinct ownership. It is subordinate to the public right of navigation, and however helpful in protecting the owner against the acts of third parties, is of no avail against the exercise of the great and absolute power of Congress over the improvement of navigable rivers. That power of use and control comes from the power to regulate commerce between the States and with foreign nations. It includes navigation, and subjects every navigable river to the control of Congress. All means having some positive relation to the end in view which are not forbidden by some other provision of the Constitution are admissible. If, on the judgment of Congress, the use of the bottom of the river is proper for the purpose of placing therein structures in aid of navigation, it is not thereby taking private property for a public use, for the owner's title was in its very nature subject to that use in the interest of public navigation. If its judgment be that structures placed in the river and upon such submerged land are an obstruction or hindrance to the proper use of the river for purposes of navigation, it may require their removal and forbid the use of the bed of the river by the owner in any way which in its judgment is injurious to the dominant right of navigation. So, also, it may permit the construction and maintenance of tunnels under or bridges over the river, and may require the removal of every such structure placed there with or without its license, the element of contract out of the way, which it shall require to be removed or altered as an obstruction to navigation. In Gilman *v.* Philadelphia (3 Wall., 713, 724) this court said:

"Commerce includes navigation. The power to regulate commerce comprehends the control for that purpose, and to the extent necessary, of all the navigable waters of the United States which are accessible from a State other than those in which they lie. For this purpose they are the public property of the Nation, and subject to all the requisite legislation by Congress. This necessarily includes the power to keep them open and free from any obstructions to their navigation, interposed by the States or otherwise; to remove such obstructions when they exist, and to provide, by such sanctions as they may deem proper, against the occurrence of the evil and for the punishment of offenders. For these purposes Congress possesses all the powers which existed in the States before the adoption of the National Constitution, and which have always existed in the Parliament in England.

'It is for Congress to determine when its full power shall be brought into activity, and as to the regulations and sanctions which shall be provided."

In Gibson *v.* United States (166 U. S., 269) it is said:

"All navigable waters are under the control of the United States for the purpose of regulating and improving navigation, and although the title to the shore and submerged soil is in the various States and individual owners under them, it is always subject to the servitude in respect of navigation created in favor of the Federal Government by the Constitution."

Thus in Scranton *v.* Wheeler, supra, the Government constructed a long dike or pier upon such submerged lands in the river here involved for the purpose of aiding the navigation. This cut the riparian owner off from direct access to deep water, and

he claimed that his rights had been invaded and his property taken without compensation. This court held that the Government had not "taken" any property which was not primarily subject to the very use to which it had been put, and therefore denied his claim. Touching the nature and character of a riparian owner in the submerged lands in front of his upland bounding upon a public navigable river such as the St. Marys, this court said:.

"The primary use of the water and the lands under them is for the purpose of navigation, and the erection of piers in them to improve navigation for the public is entirely consistent with such use and infringes no right of the owner. Whatever the nature of the interest of a riparian owner in the submerged lands in front of his upland bounding on a public navigable river, his title is not as full and complete as his title to fast land which has no direct connection with the navigation of such waters. It is a qualified title, a bare technical title, not at his absolute disposal, as is his upland, but to be held at all times subordinate to such use of the submerged lands and of the water flowing over them as may be consistent with or demanded by the public right of navigation."

So unfettered is this control of Congress over the navigable streams of the country that its judgment as to whether a construction in or over such a river is or is not an obstacle and a hindrance to navigation is conclusive. Such judgment and determination is the exercise of legislative power in respect of a subject wholly within its control.

In Pennsylvania *v.* Wheeling Bridge Co. (18 How., 421, 430) this court, upon the facts in evidence, held that a bridge over the Ohio River, constructed under an act of the State of Virginia, created an obstruction to navigation and was a nuisance which should be removed. Before the decree was executed Congress declared the bridge a lawful structure and not an obstruction. This court thereupon refused to issue a mandate for carrying into effect its own decree, saying:

"Although it may still be an obstruction in fact, it is not so in contemplation of law. We have already said, and the principle is undoubted, that the act of the Legislature of Virginia conferred full authority to erect and maintain the bridge, subject to the exercise of the power of Congress to regulate the navigation of the river. That body having in the exercise of this power regulated the navigation consistent with its preservation and continuation, the authority to maintain it would seem to be complete. That authority combines the concurrent power of both governments, State and Federal, which if not sufficient, certainly none can be found in our system of government."

In Philadelphia *v.* Stimson, supra, and in Union Bridge Co. *v.* United States (204 U. S., 364), many of the cases are cited and reviewed and we need add nothing more to the discussion.

The conclusion to be drawn is, that the question of whether the proper regulation of navigation of this river at the place in question required that no construction of any kind should be placed or continued in the river by riparian owners, and whether the whole flow of the stream should be conserved for the use and safety of navigation are questions legislative in character; and when Congress determined, as it did by the act of March 3, 1909, that the whole river between the American bank and the international line, as well as all of the upland north of the present ship canal, throughout its entire length, was "necessary for the purposes of navigation of said waters and the waters connected therewith," that determination was conclusive.

So much of the zone covered by this declaration as consisted of fast land upon the banks of the river, or in islands which were private property, is, of course, to be paid for. But the flow of the stream was in no sense private property, and there is no room for a judicial review of the judgment of Congress that the flow of the river is not in excess of any possible need of navigation, or for a determination that if in excess the riparian owners had any private property right in such excess which must be paid for if they have been excluded from the use of the same.

That Congress did not act arbitrarily in determining that "for the purposes of navigation of said waters and the waters connected therewith," the whole flow of the stream should be devoted exclusively to that end, is most evident when we consider the character of this stream and its relation to the whole problem of lake navigation. The river St. Marys is the only outlet for the waters of Lake Superior. The stretch of water called the falls and rapids of the river is about 3,000 feet long and from bank to bank has a width of about 4,000 feet. About two-thirds of the volume of the stream flows over the submerged lands of the Chandler-Dunbar Co., the rest over like lands on the Canadian side of the boundary. The fall in the rapids is about 18 feet. This turbulent water, substantially unnavigable without the artificial aid of canals around the stream, constitutes both a tremendous obstacle to navigation and an equally great source of water power if devoted to commercial purposes. That the wider needs of

navigation might not be hindered by the presence in the river of the construction works necessary to use it for the development of water power for commercial uses under private ownership was the judgment and determination of Congress. There was also present in the mind of Congress the necessity of controlling the overflow from Lake Superior, which averages some 64,000 cubic feet per second. That outflow has great influence both upon the water level of Lake Superior and also upon the level of the great system of lakes below which receive that outflow. A difference of a foot in the level of Lake Superior may influence adversely access to the harbors on that lake. The same fall in the water level of the lower lakes will perceptibly affect access to their ports. This was a matter of international consideration, for Canada, as well as the United States, was interested in the control and regulation of the lake water levels. And so we find in the act of 1909 a request that the President of the United States will open negotiations with the Government of Great Britain "for the purpose of effectually providing, by suitable treaty, for maintaining ample water levels for the uses of navigation in the Great Lakes and the waters connected therewith, by the construction of such controlling and remedial works in the connecting rivers and channels of such lakes as may be agreed upon by the said Governments under the provisions of said treaty."

The falls and rapids are at the exit of the river from the lake. Millions of public money have already been expended in the construction of canals and locks, by this Government upon the American side, and by the Canadian Government upon its own side of the rapids, as a means by which water craft may pass around the falls and rapids in the river. The commerce using these facilities has increased by leaps and bounds. The first canal had hardly been finished before it became inadequate. A second upon the American side was constructed parallel with the first. The two together are insufficient though the canal upon the Canadian side accommodates much of the commerce. The main purpose of the act of 1909 was to clear the way for generally widening and enlarging facilities for the ever-growing commerce of the Great Lakes. The act, therefore, looks to the construction of one or more canals and locks, paralleling those in use, and directs a survey "to ascertain and determine the proper plan * * * for constructing in the rapids * * * a filling basin or forebay from which the ship locks may be filled."

The upland belonging to the Chandler-Dunbar Co. consists of a strip of land some 2,500 feet long and from 50 to 150 feet wide. It borders upon the river on one side, and on the Government canal strip on the other. Under permits from the Secretary of War, revocable at will, it placed in the rapids, in connection with its upland facilities, the necessary dams, dikes, and forebays for the purpose of controlling the current and using its power for commercial purposes, and has been for some years engaged in using and selling water power. What it did was by the revocable permission of the Secretary of War, and every such permit or license was revoked by the act of 1909. (See act of Sept. 19, 1890, 26 Stat., pp. 426, 454, forbidding the construction of any dam, pier, or breakwater in any navigable river without permission of the Secretary of War, or the creation of any obstruction, not affirmatively authorized by law, "to the navigable capacity of such rivers." See also the later act of Mar. 3, 1899, 30 Stat., pp. 1151, 1155, and United States v. Rio Grande Irrigation Co., 174 U. S. 690, construing and applying the act of 1890.) That it did not thereby acquire any right to maintain these constructions in the river longer than the Government should continue the license, needs no argument. They were placed in the river under a permit which the company knew was likely to be revoked at any time. There is nothing in the facts which savors of estoppel in law or equity. The suggestion by counsel that the act of 1909 contemplates that the owner should be compensated not only for its tangible property, movable or real, but for its loss and damage by the discontinuance of the company's license and its exclusion from the right to use the water power inherent in the falls and rapids, for commercial purposes, is without merit. The provisions of the act in respect of compensation apply only to compensation for such "property described" as shall be held private property taken for public uses. Unless, therefore, the water-power rights asserted by the Chandler-Dunbar Co. are determined to be private property the court below was not authorized to award compensation for such rights.

It is a little difficult to understand the basis for the claim that in appropriating the upland bordering upon this stretch of water the Government not only takes the land but also the great water power which potentially exists in the river. The broad claim that the water power of the stream is appurtenant to the bank owned by it, and not dependent upon ownership of the soil over which the river flows, has been advanced. But whether this private right to the use of the flow of the water and flow of the stream be based upon the qualified title which the company had to the bed of the river over which it flows or the ownership of land bordering upon the river is of no prime im-

portance. In neither event can there be said to arise any ownership of the river Ownership of a private stream wholly upon the lands of an individual is conceivable but that the running water in a great navigable stream is capable of private ownership is inconceivable.

Whatever substantial private property rights exist in the flow of the stream must come from some right which that company has to construct and maintain such works in the river, such as dams, walls, dikes, etc., essential to the utilization of the power of the stream for commercial purposes. We may put out of view altogether the class of cases which deal with the right of riparian owners upon a nonnavigable stream to the use and enjoyment of the stream and its waters. The use of the fall of such a stream for the production of power may be a reasonable use consistent with the rights of those above and below. The necessary dam to use the power might completely obstruct the stream, but if the effect was not injurious to the property of those above or to the equal rights of those below, none could complain, since no public interest would be affected. We may also lay out of consideration the cases cited which deal with the rights of riparian owners upon navigable or nonnavigable streams as between each other. Nor need we consider cases cited which deal with the rights of riparian owners under State laws and private or public charters conferring rights. That riparian owners upon public navigable rivers have in addition to the rights common to the public certain rights to the use and enjoyment of the stream, which are incident to such ownership of the bank, must be conceded. These additional rights are not dependent upon title to the soil over which the river flows, but are incident to ownership upon the bank. Among these rights of use and enjoyment is the right, as against other riparian owners, to have the stream come to them substantially in its natural state, both in quantity and quality. They have also the right of access to deep water, and when not forbidden by public law may construct for this purpose wharves, docks, and piers in the shallow water of the shore. But every such structure in the water of a navigable river is subordinate to the right of navigation, and subject to the obligation to suffer the consequences of the improvement of navigation, and must be removed if Congress, in the assertion of its power over navigation, shall determine that their continuance is detrimental to the public interest in the navigation of the river. (Gibson *v.* United States, 166 U. S., 269; Transportation Co. *v.* Chicago, 99 U. S., 635. It is for Congress to decide what is and what is not an obstruction to navigation; Pennsylvania *v.* Wheeling Bridge Co., 18 How., 421; Union Bridge Co. *v.* United States, 204 U. S., 364; Philadelphia Co. *v.* Stimson, 223 U. S., 605.)

To utilize the rapids and fall of the river which flows by the upland of the Chandler-Dunbar Co., it has been and will be necessary to construct and maintain in the river the structures necessary to control and direct the flow so that it may be used for commercial purposes. The thirty-fourth finding of fact includes this:

"For about 20 years the Chandler-Dunbar Co., or its predecessors or some one claiming under it, has been developing power at this part of the rapids. This was accomplished by a short transverse dam near the lower boundary of its land extending out a short distance into the stream and then extending up along the bed of the stream (substantially) parallel to the bank up to the head of the rapids. This dam or wall toward its upper end diverged out into the stream the better to divert water into the headrace and into the fore bay formed by its lower part. Earlier structures of this character were replaced about 1901 by those more extensive ones which existed when this condemnation was made. While considerable in extent and cost, they are inconsiderable as compared with the structures now proposed to utilize the whole power, and they were, comparatively speaking, along the bank rather than across the stream."

The seventy first finding of fact was in these words:

"All the development works ever constructed upon the Chandler Dunbar submerged lands by anyone have been constructed after obtaining from the Secretary of War a permit therefor, and each such permit has been expressly revocable by right of revocation reserved on its face, to be exercised with or without cause. Each such permit was revoked before the commencement of this proceeding."

Upon what principle can it be said that in requiring the removal of the development works which were in the river upon sufferance Congress has taken private property for public use without compensation? In deciding that a necessity existed for absolute control of the river at the rapids, Congress has of course excluded until it changes the law, every such construction as a hindrance to its plans and purposes for the betterment of navigation. The qualified title to the bed of the river affords no ground for any claim of a right to construct and maintain therein any structure which Congress has by the act of 1909 decided in effect to be an obstruction to navigation and a hindrance to its plans for improvement. That title is absolutely subordinate to the right of navigation, and no right of private property would have been invaded if such submerged lands were occupied by structures in aid of navigation or kept free from such

obstructions in the interest of navigation. (Scranton v. Wheeler, supra; Hawkins Light House Cases, 39 Fed., 83.) We need not consider whether the entire flow of the river is necessary for the purposes of navigation, or whether there is a surplus which is to be paid for, if the Chandler-Dunbar Co. is to be excluded from the commercial use of that surplus. The answer is found in the fact that Congress has determined that the stream from the upland taken to the international boundary is necessary for the purposes of navigation. That determination operates to exclude from the river forever the structures necessary for the commercial use of the water power. That it does not deprive the Chandler-Dunbar Co. of private property rights follows from the considerations before stated.

It is said that the twelfth section of the act of 1909 authorizes the Secretary of War to lease, upon terms agreed upon, any excess of water power which results from the conservation of the flow of the river, and the works which the Government may construct. This, it is said, is a taking of private property for commercial uses and not for the improvement of navigation. But, aside from the exclusive public purpose declared by the eleventh section of the act, the twelfth section declares that the conservation of the flow of the river is "primarily for the benefit of navigation and incidentally for the purpose of having the water power developed, either for the direct use of the United States or by lease * * * through the Secretary of War."

If the primary purpose is legitimate, we can see no sound objection to leasing any excess of power over the needs of the Government. The practice is not unusual in respect to similar public works constructed by State governments. In Kaukauna Co. v. Green Bay, etc., Canal (142 U. S., 254, 273), respecting a Wisconsin act to which this objection was made, the court said:

"But if, in the erection of a public dam for a recognized public purpose, there is necessarily produced a surplus of water which may properly be used for manufacturing purposes, there is no sound reason why the State may not retain to itself the power of controlling or disposing of such water as an incident of its right to make such improvement. Indeed, it might become very necessary to retain the disposition of it in its own hands in order to preserve at all times a sufficient supply for the purpose of navigation. If the riparian owners were allowed to tap the pond at different places and draw off the water for their own use, serious consequences might arise not only in connection with the public demand for the purposes of navigation but between the riparian owners themselves as to the proper proportion each was entitled to draw—controversies which could only be avoided by the State reserving to itself the immediate supervision of the entire supply. As there is no need of the surplus running to waste, there was nothing objectionable in permitting the State to let out the use of it to private parties and thus reimburse itself for the expenses of the improvement."

It is, at best, not clear how the Chandler-Dunbar Co. can be heard to object to the selling of any excess of water power which may result from the construction of such controlling or remedial works as shall be found advisable for the improvement of navigation, inasmuch as it had no property right in the river which had been taken." It has, therefore, no interest whether the Government permit the excess of power to go to waste or make it the means of producing some return upon the great expenditure.

The conclusion, therefore, is that the court below erred in awarding $550,000, or any other sum, for the value of what is called "raw water," that is the present money value of the rapids and falls to the Chandler-Dunbar Co. as riparian owners of the shore and appurtenant submerged land.

Coming now to the award for the upland taken:

The court below awarded to the Chandler-Dunbar Co. on this account—

(a)	For the narrow strip of upland bordering on the river, having an area of something more than 8 acres, excluding the small parcels described in the pleadings and judgment as claims 95 and 96, $65,000, less 7 per cent of that sum on account of Portage Street, which the court later found belonged to the United States and not to that company	$60,450
(b)	For the small parcels covered by claims 95 and 96	25,000
(c)	For a half interest in lot on bridge property	338

These awards include certain sums for special values. The value of the upland strip, fixed at $60,450, was arrived at in this manner:

(a) For its value, including railroad sidetracks, buildings, and cable terminal, including also its use "wholly disconnected with power development or public improvement—that is to say, for all general purposes, like residences or hotels, factory sites, disconnected with water power, etc., $20,000."

(b) For use as factory site "in connection with the development of 6,500 horsepower, either as a single site or for several factories to use the surplus of 6,500 horsepower not now used in the city, an additional value of $20,000."

(c) For use for canal and lock purposes, an additional value of $25,000.

The small parcels constituting claims 95 and 96 were valued at $25,000.

These two parcels seem to have been connected by a costly fill. They fronted upon deep water above the head of the rapids. They had therefore a special value for wharves, docks, etc., and had been so used. The gross sum awarded included the following elements:

(a) For general wharfage, dock, and warehouse purposes, disconnected with development of power in the rapids, $10,000.

(b) For its special value for canal and lock purposes, an additional sum of $10,000.

(c) In connection with the canal along the rapids, if used as a part of the development of 4,500 (6,500) horsepower, an additional value of $5,000.

The United States excepted to the additional value allowed in consequence of the availability of these parcels in connection with the water power supposed to be the property of the Chandler-Dunbar Co., and supposed to have been taken by the Government in this case. It also excepted to so much of the awards as constituted an additional value by reason of availability for lock and canal purposes.

These exceptions, so far as they complain of the additional value to be attached to these parcels for use as factory sites in connection with the development of horsepower by the Chandler-Dunbar Co., must be sustained. These "additional" values were based upon the erroneous hypothesis that that company had a private property interest in the water power of the river, not possibly needed now or in the future for purposes of navigation, and that that excess or surplus water was capable, by some extension of their works already in the river, of producing 6,500 horsepower.

Having decided that the Chandler-Dunbar Co. as riparian owners had no such vested property right in the water power inherent in the falls and rapids of the river, and no right to place in the river the works essential to any practical use of the flow of the river, the Government can not be justly required to pay for an element of value which did not inhere in these parcels as upland. The Government had dominion over the water power of the rapids and falls and can not be required to pay any hypothetical additional value to a riparian owner who had no right to appropriate the current to his own commercial use. These additional values represent, therefore, no actual loss and there would be no justice in paying for a loss suffered by no one in fact.

"The requirement of the fifth amendment is satisfied when the owner is paid for what is taken from him. The question is what has the owner lost, and not what has the taker gained." (Boston Chamber of Commerce v. Boston, 217 U. S., 189, 194, 195.)

Neither can consideration be given to probable advancement in the value of such riparian property by reason of the works to be constructed in the river by the Government, or the use to which the flow of the stream might be directed by the Government. The value should be fixed as of the date of the proceedings and with reference to the loss the owner sustains, considering the property in its condition and situation at the time it is taken and not as enhanced by the purpose for which it was taken. (Kerr v. Park Commissioners, 117 U. S., 379, 387; Shoemaker v. United States, 147 U. S., 282, 304, 305.)

The exception taken to the inclusion as an element of value of the availability of these parcels of land for lock and canal purposes must be overruled. That this land had a prospective value for the purpose of constructing a canal and lock paralled with those in use had passed beyond the region of the purely conjectural or speculative. That one or more additional parallel canals and locks would be needed to meet the increasing demands of lake traffic was an immediate probability. This land was the only land available for the purpose. It included all the land between the canals in use and the bank of the river. Although it is not proper to estimate land condemned for public purposes by the public necessities or its worth to the public for such purpose, it is proper to consider the fact that the property is so situated that it will probably be desired and available for such a purpose. (Lewis on Eminent Domain, sec. 707; Patterson v. Boom Co., 98 U. S., 403, 408; Shoemaker v. United States, 147 U. S., 282; Young v. Harrison, 17 Ga., 30; Alloway v. Nashville, 88 Tenn., 510. Sargent v. Merrimac, 196 Mass., 171.) Patterson v. Boom Co. was this: A boom company sought to condemn three small islands in the Mississippi River so situated with reference to each other and the river bank as to be peculiarly adapted to form a boom a mile in length. The question in the case was whether their adaptability for that purpose gave the property a special value which might be considered. This court held that the adaptability of the land for the purposes of a boom was an element which should be considered in estimating the value of the lands condemned. The court said, touching the rule for estimating damages in such cases:

"So many and varied are the circumstances to be taken into account in determining the value of property condemned for public purposes that it is perhaps impossible to formulate a rule to govern its appraisement in all cases. Exceptional circumstances

will modify the most carefully guarded rule, but as a general thing we should say that the compensation to the owner is to be estimated by reference to the uses for which the property is suitable, having regard to the existing business or wants of the community or such as may be reasonably expected in the immediate future."

In Shoemaker *v.* United States, supra, lands were condemned for park purposes. In the court below the commissioners were instructed to estimate each piece of land at its market value and that—

"The market value of the land includes its value for any use to which it may be put and all the uses to which it is adapted, and not merely the condition in which it is at the present time and the use to which it is now applied by the owner; * * * that if, by reason of its location, its surroundings, its natural advantages, its artificial improvement, or its intrinsic character, it is peculiarly adapted to some particular use—e. g., to the use of a public park—all the circumstances which make up this adaptability may be shown, and the fact of such adaptation may be taken into consideration in estimating the compensation."

The court approved this instruction.

The Chandler-Dunbar Co. has also assigned as error the denial of any award on account of a portion of Portage Street to which it claimed title. The title to that parcel has never passed out of the United States. It was part of a street laid off by a survey made of the village of Sault Ste. Marie, a town which had grown up on public land of the United States. But that survey was never carried into a patent, and the village never accepted this part of the street. Thus abandoned, it was occupied for a time by the Chandler-Dunbar Co., but not long enough to acquire title. The court did not err in holding that the company had acquired no title and that title was already in the United States.

The award to the St. Marys Power Co. as owner of island No. 5 is excepted to. The value of that island was fixed at $21,000. That amount was reached, as shown by the seventieth finding of fact, in this manner:

a. As a base value, for general purposes, as for a cottage or fishing station	$1,000
b. As a strategic value, growing out of the extent to which it may control or block the most available development by upstream owners	15,000
c. As an additional value, by reason of its special suitability for lock or canal purposes	5,000

This island No. 5, otherwise known as Oshawano Island, is on the American edge of the rapids and below the Chandler-Dunbar property and opposite that part of the shore belonging to the United States. It has an area of about one-third of an acre. The court found that it had no appreciable water power which was in any sense appurtenant, and so no allowance was made on that account. Because none was made the St. Marys Power Co. sued out a writ of error. The reasons which have induced us to deny such an allowance in respect of upland upon the bank of the river require the assignment referred to to be held bad. The court below held, however, that the island had value in other ways, being those mentioned above. In respect to the allowance of $15,000 as its "strategic value" the court below in its opinion said:

"Owing to its location this property had, and always has had, a strategic value with reference to any general scheme of water development in the river and because it must be included as a tailrace site, if not otherwise, in any completely efficient plant for development by any owner, private or public. This value is denied because it is, as Government counsel say, of the 'hold up' character. It should not be permitted to assume the latter character, nor should the fair strategic value be denied because there might be an attempt at exaggeration or abuse. I fix this so-called strategic value at $10,000 (afterwards raised to $15,000), and it should be awarded under the circumstances of this case to whomsoever the owner may be."

This allowance has no solid basis upon which it may stand. That the property may have to the public a greater value than its fair market value affords no just criterion for estimating what the owner should receive. It is not proper to attribute to it any part of the value which might result from a consideration of its value as a necessary part of a comprehensive system of river improvement which should include the river and the upland upon the shore adjacent. The ownership is not the same. The principle applied in Boston Chamber of Commerce *v.* Boston (217 U. S., 189) is applicable. In that case it appeared that one person owned the land condemned subject to servitudes to others. It was sought to have damages assessed upon a bill in which all of the interests joined for the purpose of having a lump sum awarded, to be divided as the parties might or had agreed. If this could be done, it was agreed that the estate, considered as the sole unencumbered estate of a single person, was worth many times more than if the damage should be assessed according to the condition of the title at the time. This court held that the requirement of compensation when land is taken for

a public purpose "does not require a disregard of the mode of ownership. It does not require a parcel of land to be valued as an unencumbered whole."

The "strategic value" for which $15,000 has been allowed is altogether speculative. It is based not upon the actual market value for all reasonable uses and demands but the possible worth of the property to the Government.

A "strategic value" might be realized by a price fixed by the necessities of one person buying from another, free to sell, or refuse, as the price suited. But in a condemnation proceeding the value of the property to the Government for its particular use is not a criterion. The owner must be compensated for what is taken from him, but that is done when he is paid its fair market value for all available uses and purposes. (Lewis, Eminent Domain, 3d ed., sec. 706; Moulton *v.* Newbury Water Co., 137 Mass., 163, 167; United States *v.* Seufert Bros. Co., 78 Fed., 520; Alloway *v.* Nashville, 88 Tenn., 510, 514; United States *v.* Honolulu Co., 122 Fed., 581.)

The exception must be sustained.

One other assignment by the St. Marys Power Co needs to be specially noticed. The title to Oshawano Island is in litigation between the United States and the St. Marys Power Co. For this reason the award to that company was ordered to remain in the registry of the court until that litigation was ended. The St. Marys Power Co contends that when the United States sought the condemnation of the property in this proceeding it thereby conceded the title to be in it. But the pleadings show that no such concession was made. The state of the title and of the pending litigation was set up and we think all rights were thereby reserved.

The assignments of error by the Michigan Lake Superior Power Co. must be overruled. No property, real or hypothetical, has been taken from it.

Other assignments of error by one or another of the several plaintiffs in error need not be specifically noticed. They are all overruled as either covered by the views we have expressed or as having no merit.

The judgment of the court below must be reversed and the cases remanded with direction to enter a judgment in accordance with this opinion.

True copy.

Test:

_____,

Clerk Supreme Court United States.

Senator THOMAS. I would like to ask, before we adjourn, whether it would not be more likely to be effective that is, cheap power and cheap light by the Government's following up the nature of the deductions from that decision, instead of leasing or otherwise disposing of these power sites, improve them under the assumption that it is improving navigation, and manufacture this electric energy and let the people have it at cost.

Mr. FISHER. Senator Thomas, that is a pretty far step.

Senator THOMAS. If it be true and I quite agree with you that cheap electricity, cheap power, and cheap light, etc., is the most desirable advantage that can be secured from the development of these now latent powers, I think it is only logical to assume that the Government would be able to furnish it far more cheaply than anybody else; therefore, it should, upon the assumption that it is improving navigation, go into the business of developing energy, and let the people have it at cost.

Mr. FISHER. You would not get into any quarrel with me over that.

My idea about a matter of that sort is this, that the wisest development in things of that kind is evolutionary development, proceeding progressively, and very carefully, proceeding first with those steps most clear and most justified. I think this bill is drawn along that line. You notice it has no charge at all to a municipality.

Senator THOMAS. I will not quarrel either if you will substitute the State for the United States as the authority to manufacture and to distribute the power.

Mr. FISHER. Well, I stated in my annual report, I think, the last year I was Secretary, that in my judgment that was probably the way

it ought to be done, but we cross no bridges in that regard in this act. We have not committed the Federal Government to anything. We have merely reserved something as to what the Federal Government shall do in taking over these properties at the end of any leases that may be granted now. Nothing will be done without an act of Congress. You merely have reserved an option; you have kept the door open in that regard.

You may then decide that instead of the Federal Government doing it it will turn over all the powers to any State which is ready to take them over and develop them itself. That may be the wisest decision. But if you wait now to take up with your colleagues in the Senate and the House the question of whether they are prepared to go so far as to turn these powers over to the States for development, and whether the States are now prepared to do that, you are going to leave power development in the unfortunate condition it has been in for many years. One thing you must get rid of is this revocable permit. It is wrong in every way; it is wrong in principle and in practice.

Senator THOMAS. There is no quarrel between us on that either.

Mr. FISHER. But I believe you want to go just as far as you can in getting things in your permit to protect the public interests. Then when you come to fixing compensation, I think that the benefit of the doubt should be given to the private interests. I think you should make it to their interest to develop. I think this enterprise should be held up as attractive to the developer and investor, but we ought not to lose sight of the restrictions and limitations that should be put upon them for the benefit of the public. The wiser manufacturers and power developers are perfectly willing that you should do it, and they will have no difficulty in financing their enterprises with those things in the permit. But if you give them away once then the die is cast; it is too late then; you can not call them back.

Senator NORRIS. If you are through with that particular point, I wanted to get your judgment on another feature of the bill.

Under the bill all hydroelectric energy that goes into interstate use will be under control both as to service and as to charges of the Secretary of the Interior. Now, would the bill be improved if that important function, which I think you will concede is a very important one, were left to some board either in existence or some body that may be provided by this bill similar, for instance, to the Interstate Commerce Commission?

Mr. FISHER. Senator Norris, I believe that you will have an administrative commission. It may be that this trades commission which has been created will be used as the agency, and I personally believe that a commission of that kind, high grade, paid an adequate salary and given adequate dignity and responsibility, is a better agency than any single individual with the administrative duties that necessarily fall upon a member of the Cabinet. But I think it would be a great mistake to delay the passage of this bill for the working out of any such method of control. This bill says you may do that. It says the power to regulate shall be in the Secretary of the Interior or any board or commission that may be appointed.

Senator NORRIS. My question was as to whether it would be advisable to provide for that in this bill.

Mr. FISHER. I think it will be a mistake. I think you will get into a discussion, and a lot of questions will be raised which will delay this bill. The bill does not question the right of the State to control where there is already a State commission. The Federal Government and the Secretary of the Interior shall not have to bother with that. He will be only too glad to serve only as an additional agency, upon whom the people can call.

SENATOR NORRIS. There are several reasons why, the Secretary of the Interior being a member of the Cabinet, and an appointee, and, as past experience has shown, they change very often as administrations change, and even in an administration Cabinet officers change, but if you assume that we will always have good Secretaries of the Interior, like we have now, for instance, a man in whom I think we all have confidence, at the same time he necessarily can not become so well posted and can not become an expert in the business like he would if he were appointed for a long term, like the Interstate Commerce Commission, until he understood all of the details, and could not be deceived like he could under conditions where he is liable to be changed. Even though we will assume he wants to do the best thing possible, lots of times he would find it difficult to do it. He would not know what to do. He would have to depend upon the advice of his subordinates.

Mr. FISHER. I agree with you that it would be much better to have a commission regulate such things as this instead of leaving it to the Secretary of the Interior. But I am also very decidedly of the opinion that if you should take this bill, which has already passed the House, in which I myself would suggest some changes, if it were a matter of first impression, I think it would be a big mistake, in as important a subject as this, when you have a bill of this kind, to make any important changes of that kind, attempting to create a commission for that purpose, thereby perhaps defeating the passage of legislation which I think is greatly needed.

Senator NORRIS. There is no doubt but what it is needed. At least I think it is. But it seems to me it is quite important in the beginning of new legislation like this that we do not make a mis-step the first one we take. I think it is conceded in all these commissions, State commissions and Federal commissions that regulate rates and that have power to regulate service, that a long tenure of office is almost necessary to make it successful. It ought to be relieved from politics; and the Secretary of the Interior is an appointee, and the appointment is made often from political or partisan considerations.

Mr. FISHER. I do not know that I can add anything to what I have said. I think it is desirable to have it under the control of a commission rather than under the control of an individual, especially where the individual has a large amount of work, and important work, such as a member of the Cabinet has. But at the same time I would regard it as a mistake to retard the passage of this bill for the purpose of working out provisions with regard to such a commission.

The CHAIRMAN. Mr. Fisher, what would you think of an amendment to the bill to provide that where less than 5 per cent of the land occupied by a power plant was Government land, the provisions of this bill shall not apply to it except that the corporation shall pay a reasonable rental for the small quantity of land for 50 years or such length of time as the lease runs?

Mr. FISHER. I think, Senator, that that would be a very grave mistake, if not a fatal error. The whole purpose of these provisions that are inserted in this bill in the public interest in no way depends upon the quantity of interest which the Government owns, except as a technical basis for the exercise of the authority. But, irrespective of the quantity of land which the Federal Government had, I think that any fractional interest, I do not care how small, which the Government has, which would give the United States authority to make provisions which are clearly in the public interest, should be taken advantage of. I think you will find in many cases, and certainly you will find in the Montana power case, the interest was comparatively small as compared with the great development of water at Great Falls, and the value of the transmission line, in fact exceedingly small, relatively, nevertheless we put all those provisions in the permit. We put the very things we are talking about here in that permit, and the grantee accepted it and stated publicly that he thought they were wise provisions in the public interest.

The president of the railroad publicly stated that he was greatly gratified with the permit, and no complaint was made. I think that is true everywhere. Of course the private owner or private grantee would like to make just as much as he can out of it. He does not like to give up anything, although it is in the public interest. If he thinks he has 95 per cent of what he needs, yet has to come here and ask for another 5 per cent that, to him, is clearly a case which he regards as a misfortnue. If he were asking for 100 per cent he would accede to these things without question. The charge, however, ought not be any greater in one case than in the other. I assume, as a matter of fact, that the function of this compensation which the Government is going to exact is such that it would not depend at all on the matter of the Government land being 5 per cent or 100 per cent. I can conceive of permits which would be granted where the compensation for 100 per cent, if it were on public lands, would not be any more than if it was 5 per cent, because the purpose of the compensation is chiefly as a basis for regulation.

The CHAIRMAN. Even in an extreme case where only 1 per cent of the land is Government land, do you think, that land being used for overflow purposes, for example, that ought to come under this act?

Mr FISHER. Yes, sir; I think so.

The CHAIRMAN. You would not make any distinction there?

Mr. FISHER. No. I think the only thing to determine is whether the Government has a legal right to exact these things which it is justly in the public interest to exact.

The CHAIRMAN. Mr. Fisher, we thank you.

Mr. FISHER. Mr. Chairman, referring to the question about the 5 per cent, I assume that you mean 5 per cent in value and not in area.

The CHAIRMAN. In area.

Mr. FISHER. The area of course would not have any bearing on it, because it might be the dam site. I can conceive of a fraction of 1 per cent being largely the essence of the whole thing.

The CHAIRMAN. It might be simply a use of the public land for overflow purposes or for right of way.

Mr. FISHER. You can see, of course, that superficial area would not be a proper test anyway, because it might be worth 99 per cent of the whole thing, although it is only 5 per cent of the area.

The CHAIRMAN. It has hardly seemed to me where a very small percentage of the area used belongs to the United States Government, and this was some incidental use that the party making the application ought to be subjected to a great many rules and regulations to which a party acquiring land by a private grant would not be subjected, where it is all privately acquired.

Mr. FISHER. Can that possibly be the proper point of view of a representative of the Government? Is not the point of view of a representative of the Government properly first what ought to be done in the public interest if you have the power; second, have you the power? If you decide first that certain things are in the public interest and ought to be done and you find you have no power you can only regret it; but if you find you have the power, ought you not to exercise it in the public interest? Can you possibly justify not exercising the power by saying, "While it is true we have the power, yet the land from which we derive our power is simply a small part of the larger thing?"

The CHAIRMAN. There are many cases where the Government has no power.

Mr. FISHER. Then it can not act. It can only regret.

The CHAIRMAN. Then it can not act.

Mr. FISHER. I am assuming that it is 1 per cent, as you say; but that 1 per cent is essential, and it is perfectly proper for the Government to say, "If you can get along without it, then get along, but if you come to us asking for it we will insert all these things in the grant which are for the public interest."

The CHAIRMAN. Well, it would only be applicable as far as financing the enterprise is concerned—whether or not itwould prevent any obstacle to financing it. That is one of the great questions that have been introduced here by everybody, namely, whether or not the regulations or law enacted would prevent the financing of these enterprises.

Mr. FISHER. Senator, in my judgment, this law, if enacted and accepted by the power people, as it will be, in good faith and administered, as it will be, in good faith, will be of incalculable financial advantage to them, and will permit development and investment. You may depend upon it if these things are really in the public interest and are not inserted in the law there is going to be public dissatisfaction and unrest until they are put in. If you pass a law that does not adequately protect the public interest you can depend upon it that every means will be used by the representatives of the public in one way or another to repair that mistake.

The assurance of stability in these enterprises, on a fair basis, is of far more importance to the investor than any of these reservations in this bill. I have had power people tell me that again and again. They say that is the one thing they want. If they will turn their attention to such things, if they will cease to oppose those things which are in the public interest, and direct the attention of the public to such things as the importance of obsolescence, how these investments are required to be replaced, and the uncertainty of the market, and matters of that kind, all of which affect the question of compensation

to be exacted, all of which affect the question of how far the rates should be lowered by regulation, I think they will protect their own interests far better than they will by raising questions about matters which, on correct theory, ought to be in the grant.

To-day the public is thinking about whether there is a power trust, whether we are in danger of having these great natural resources absorbed by a few people for their own benefit; whether they are going to wake up 30 or 40 or 50 years from now and find that a great mistake has been made by your failure to reserve some of these things.

As soon as these things are settled and settled right, and the power people begin to talk about how much return they ought to be allowed to make, how much they should be allowed to set aside for depreciation, including obsolescence, and what is necessary in the way of a return on their property, I think that you will find their real interest will be promoted.

It is in this case just like it was in the case of the railroad commission a few years ago. Who would have thought that the Interstate Commerce Commission could be induced to acquiesce in a horizontal increase asked not by one railroad but by all railroads, practically, all coming in and saying, "We want a horizontal increase of 5 per cent in our rates?" Yet when we get through some of these things about which the railroads quarreled, the same sort of things you have here, in the beginning of the Interstate Commerce Commission—you have just the same things here that they had to contend with—but after you get through with all of it and the jurisdiction and policy of the Interstate Commerce Commission was established, you began to see the railroad men rising and saying, "On the whole we think we are better off under this Interstate Commerce Commission than otherwise."

The CHAIRMAN. We will have to close. We thank you, Mr. Fisher.

Mr. MITCHELL. I think Mr. Fisher has touched upon one of the most important things in this whole discussion, and that is if we can not get the money all of the things we are talking about are of no avail. The most important thing is to get the money; the next is that it shall be cheap and available when wanted. It is my business to get money for people to develop power, not only new ones but to get money to provide for the growth of the old ones. And to get money, I say to you, I have found very many times that stability is of very much more importance than the yield. It seems to me Mr. Fisher has touched the vital spot when he suggests that we write stability into the law, when it is passed, in terms under which the people will feel that the Government has some solicitude not as to how much you will get on the par value of the securities, but on the cash that goes into the property. With this cloak of governmental solicitude thrown around it you will give the people confidence in it, and then you can get the money easier and at a much lower rate.

I was going to ask Secretary Fisher if that had not been his observation in Chicago, where the city in effect put the cloak of governmental solicitude and protection around the cash invested in consolidating and modernizing the street railway system? Has it not given confidence in the securities, and has it not been effective?

Mr. FISHER. It undoubtedly has, Mr. Mitchell. The law under which we acted in Illinois is, of course, if anything, much more drastic than this law; and the statute, when it is passed, must, to

anybody who is sitting down looking with apprehension, have in it things which will seem to the investor questionable, because every time you reserve the right to do something in the way of restraint on private freedom of action it is a restraint, but the important thing is how the act is administered. Our Illinois statute is broad enough and has enough bristles sticking out to apparently frighten the investor, but when the statute was administered we put into our street railway ordinances I think all of the provisions you have here. Certainly the compensation was sufficient to pay the city of Chicago something in excess of $2,000,000 a year, and there are all sorts of regulations, but the securities of those companies have been stable as they never were stable before in their entire history, and their dividends are, I think, about 9 or 10 per cent.

Mr. MITCHELL. In Chicago you started out by making an appraisal, and then you started off with that as a basis plus the book record on new money?

Mr. FISHER. Yes, sir.

Mr. MITCHELL. Consequently you made a new start?

Mr. FISHER. Yes.

Mr. MITCHELL. The law ought to be so designed, in the first place, that the investor would be perfectly safe in knowing that nobody is going to confiscate the investment at the time of taking it over.

Mr. FISHER. Is not that taken care of in this statute?

Mr. MITCHELL. I do not know that it is. The point I want to bring out is that you ought to have it so clear that there can be no question about it. You ought to throw every possible safeguard around it, so that the investor will be certain to get back his principal unimpaired by obsolescence and other charges against the property which can not within the time be amortized.

Mr. FISHER. I think so.

Mr. MITCHELL. Because in this bill you say you will take it over at a fair value, as to one part, and the other at its actual cost. There is a good deal of question as to whether, if he were not able to amortize the investment and obsolescence the last four or five years he might not get his money back.

Mr. FISHER. It seems to me that is possible.

Mr. MITCHELL. I wanted to know what you did in Chicago, to know what the fact was. I wanted to check my views about it by getting your views as to how important it is to investors to know that they will get their principal back at the end of the term.

Mr. FISHER. I think that is of first importance. In Chicago we have it absolutely stipulated that the city of Chicago, at the end of six months, should have the right to take over the property. When that was first suggested the street railway men threw up their hands and said it was impossible to do anything; but in the end they had no difficulty in raising somewhere between $50,000,000 and $70,000,000, and the company pays 5 per cent interest on its bonds, and they have been usually a little above par, and the stocks have paid good dividends based upon any proper theory of investment.

Senator NORRIS. On the question directed to you by Mr. Mitchell, and your answer to him as to the practice in the city of Chicago, did it develop that when the street car companies paid the city of Chicago $2,000,000 that they increased their fares and the charges to the consumer?

Mr. FISHER. They certainly did not. On the contrary they have extended the zone in which they give universal transfers.

Senator NORRIS. So as a matter of fact the license fee they paid made no difference to the consumer?

Mr. FISHER. No; it did not. But it is fair to say that these ordinances were based upon a fixed 5-cent fare.

Senator NORRIS. They charged a 5-cent fare before you had the ordinance?

Mr. FISHER. We felt that the 5-cent fare was the better plan, but we did extend the application of the universal transfer.

Mr. MITCHELL. In case they take it over at any time the purchaser should assume the outstanding bonds?

Mr. FISHER. Yes; and so it ought to be here.

Mr. MITCHELL. There is nothing of that sort in this bill.

Mr. FISHER. If the issuance of the securities is made subject to the approval of the Secretary or subject to this board, if one is created, of course they would have to be taken over subject to the bonds.

Mr. MITCHELL. Of course the clearer the security of the investment is made the cheaper you can get your money.

(At 12.30 o'clock p. m. the committee took a recess to 2 o'clock p. m.)

AFTER RECESS.

The committee reconvened pursuant to the taking of recess.

The CHAIRMAN. All right, Mr. Wells; we will hear you now.

STATEMENT OF MR. PHILIP P. WELLS, OF WASHINGTON, D. C.

Mr. WELLS. Mr. Chairman, I may properly begin with a brief statement of my experience and viewpoint. I have been exceedingly interested in this question for the past eight years, and have given a very large part of my time to it. Most of that time has been given as an administrative officer in the Government service, both in the Forest Service and in the office of the Secretary of the Interior, and I am therefore one of those minor officials, or I was during that time, against whom criticism has perhaps been hinted at in this committee.

I am very anxious that the long period of doubt about water-power development should be ended and that this bill should pass. I am now engaged in the practice of law in the city here, giving special attention to irrigation and water-power matters.

The essential principle that underlies this bill is one that I have been contending for, to the extent of my ability, for all these years, and that is that this should be a matter of bargain between private interests and the public, and not a gratuity from the public to private interests. That was expressed in a certain outline of water-power policy which I prepared, as counsel for the National Conservation Association, in the interval between my two public employments that I have mentioned and which you will find in the record of the House hearings as Exhibit K at page 629.

I only refer to it here as showing the things we were then contending for, which, in our judgment, this bill now embodies, to wit, the principle of a bargain between private interests and the public. The private interests can not, for one reason or another, develop and carry

on the business without going to the public and asking help, and no matter which public it goes to, whether the Federal Government or State, and no matter what kind of help it is asking, if public help is necessary that is the time for the public to make the bargain.

Secondly, I want to say a word about the relation of this bill to irrigation. I notice, Senator Works, that you have asked about that relation of other witnesses, and inquired whether there was anything in this bill that tended to aid irrigation.

Senator WORKS. Yes; I would be very glad to have your views on the subject.

Mr. WELLS. I think there are several things that do tend to benefit irrigation, and the first one of them is the repeal of other acts under which power privileges can be acquired.

One of those other acts is the act of 1898, which provides that where an irrigation easement has been acquired it may also be used for the development of power as subsidiary to the irrigation. And there has been a great controversy as to what "subsidiary" meant, and the public officer having the administration of the irrigation act is suspicious of the man who comes along and asks for an irrigation easement, because of that act of 1898. If that act of 1898 were not on the books he would not worry, and an obstacle against the granting of an irrigation easement would thereby be removed.

Now, this bill, in section 15, repeals all acts providing for the use of lands of the United States for any of the purposes to which this act is applicable, and I think that will, as a matter of administration, be a very great aid to irrigation development.

Moreover, this bill gives discretion to the Secretary of the Interior to grant or withhold a lease when a power company comes and asks for one. If that were mandatory, the Secretary would have to grant that lease, no matter whether he thought the site ought to be kept for irrigation use or not, and therefore I think that discretionary power in the Secretary is advantageous to the irrigation interests.

Senator WORKS. I have no doubt that under the bill the Secretary of the Interior would have the right to refuse the lease to anyone for power purposes if he concluded it would be more valuable and more serviceable to the public as a site for irrigation purposes; but that, I think, is as far as he can go. There could be no combination of both power and irrigation which, I think, in some ways should be provided for; that is to say, the Secretary of the Interior should have some discretion in making it obligatory upon the corporation to which the grant is made to supply water for irrigation as well as for power purposes.

Senator ROBINSON. May I interrupt you there just a moment?

Senator WORKS. Yes.

Senator ROBINSON. Did you see the amendment which was on the table this morning, and which I think was prepared by Mr. Finney, touching that feature of the case?

Senator WORKS. No; I did not.

Senator ROBINSON. Have you seen it, Mr. Wells?

Mr. WELLS. I have not seen it.

Senator NORRIS. Has it been printed?

Senator ROBINSON. No; it has not. I think it was just handed to the chairman for the purpose of our considering it.

Senator NORRIS. I would like to have it put in the record.

Senator ROBINSON. I suppose the chairman will do so, if he thinks it should be done.

Senator WORKS. I think that is rather important, and that is the reason I have been urging it.

Senator ROBINSON. Is there any obstacle, in the public interest, to obtain the use of those sites for irrigation and power purposes where they can apparently be combined?

Mr. WELLS. None whatever.

Senator ROBINSON. If the Secretary is only authorized to grant permits for power purposes, that would not imply the right to grant permits for irrigation purposes, would it? And the point that Senator Works makes is that unless the act specifically provides that he shall have discretion, in such a case as he thinks the public interests require, to authorize the use of waters for all of those sites for the combined purposes, he can not have that power even though he might think that was very advantageous to the public.

Mr. WELLS. I agree heartily with the suggestion you make, sir, and that Senator Works has made, that those two things should be combined and there should be authority to combine them.

I am inclined to think that can be done under this act, but if any specific words will put it beyond doubt, I think it will be a good thing to write them in. The law now gives a permanent easement for irrigation, and this bill will give a lease for power. I do not think it would be beyond the power of the Secretary to combine the two on the same reservoir site, but to put that beyond any doubt I think it would be well to have adequate provision in the bill.

Senator ROBINSON. You think he could act under both the laws at once?

Mr. WELLS. I do.

Senator ROBINSON. And apply them both in one case?

Mr. WELLS. This morning when that matter was under discussion I sought an opportunity, which did not occur, to interrupt and call to Secretary Fisher's attention an existing case in which that very thing had been done out in Senator Works's country. It was the case of the Volcan Land & Water Co., where an irrigation permit was issued involving a drop of some 1,500 feet in the water conduit, which made power development possible. A power permit was issued for the same conduit for which an irrigation easement was issued. Some critics said that was going too far, further than the law authorized, but I do not think so. If this bill does not authorize that it ought to.

Senator ROBINSON. Manifestly, if an administrative officer is to exercise a discretion, the law ought to vest that discretion in him.

Mr. WELLS. There is no question about that.

Senator NORRIS. In the case you put, were the people who wanted the water for irrigation the same identical people who wanted it for power purposes?

Mr. WELLS. Yes, Senator. The situation was this: There was a bona fide irrigation project which took the water from high in the mountains and was going to spread it over some lands suitable for citrus fruits in southern California. They took the water by a tunnel through the mountain, and when it came out on the other side of the mountain there was an opportunity as that water flowed down toward the irrigable lands to drop it 1,500 feet. Consequently you had a situation where there ought to be power developed and

there ought to be irrigation developed at the same time by the same people.

Senator NORRIS. One of the difficulties in drafting an amendment of that kind would be the question, I would think, that it is very desirable, at least, if not imperatively necessary, in an irrigation project, that the rights should be perpetual.

Mr. WELLS. Yes.

Senator NORRIS. And that is not desirable, or at least that is not the theory of this bill, in which I concur, to give a perpetual right as far as the power is concerned. How would you suggest that we could overcome that difficulty in drafting such an amendment?

Mr. WELLS. I have never considered the wording of such an amendment, Senator, before this morning, when the matter was discussed.

Senator WORKS. It may be that if the matter is left entirely free, the regulating power of the State might control the use and application of the water. But the difficulty that I see in the way of that is the fact that this site is to be leased for a specific and exclusive purpose that would take away the right from the regulatory power of the State. That is what I am afraid of. If a corporation in California has developed the water, by storage or otherwise, the authorities of the State could compel its application to beneficial uses; but you could not do that, as far as the site is concerned, where it is granted for a specific purpose by the Government.

Senator NORRIS. For a limited term, particularly?

Senator WORKS. Yes; that is the trouble I see about it.

Mr. WELLS. It would seem to me that when the term expired, Senator Norris, the Government would be as free to renew the permit as it would be if that water did not happen to be used for irrigation.

Senator NORRIS. I agree with that, but the difficulty, as I see it, from a practical standpoint, would be that the man could own, for instance, the land that was irrigated. In all irrigation laws the right goes with the land. Now, if that right depended on the permit of the power company, there might be—I do not know that there would, but this has just occurred to me—difficulties there that the irrigationist would have to meet.

Mr. WELLS. I would not think them at all insurmountable. The irrigationist should be subject to the power man's having the right to use his water as it flowed by.

Senator NORRIS. I agree with you fully in that.

Mr. WELLS. But I think it is entirely possible to accomplish those two things.

I understand, also, that the quantitive restriction on sales not more than 50 per cent to one purchaser was put in this bill at the instance of persons interested in irrigation; but I am not fully informed about that. I think if that restriction is to stay in the bill, it should be permissible for the Secretary to enlarge the maximum.

Then there is a section of this bill

Senator NORRIS. Before you leave that, while you are right on that subject, I think there are some evils that that particular provision was intended to meet. At the same time I can see how it would lead us into other evils and difficulties. Why could it not be solved

entirely by leaving that provision in the bill and adding to it a proviso that the Secretary, in his discretion, should modify it and permit the sale of a larger amount than one-half of his power to any one consumer?

Mr. WELLS. I think that would be a much better way to handle it.

Senator ROBINSON. That was your suggestion?

Mr. WELLS. I am afraid of that rigid restriction. I am afraid it will be found to be a bad thing when we have to work under it.

Senator WORKS. It would, undoubtedly, in certain cases.

Mr. WELLS. Then the provision in this bill which allows the entry of lands withdrawn for water power, subject to the right of the Government or its proper lessees to use them for power purposes, seems to me to be a great benefit to irrigation.

I am not personally familiar with the Green River case that was discussed here, but from what was said about it by Senator Smoot and others I take it that irrigable lands along that river were withdrawn as a power reserve and, being withdrawn as a power reserve, they could not be entered under the homestead law or desert-land act to be irrigated. It may very well be that within that withdrawal, which may stretch along for 6 or 7 miles on either side of the river, that a power house, which will be used for power development, will ultimately be placed at only one point, which point is not yet known. Now, if this bill passes with that provision in it it will throw open all of that land for irrigation without sacrificing public control of the ultimate power development, and it seems to me that is desirable.

Senator WORKS. Yes. I understand there is a long stretch of land running through that site that has been withdrawn from entry.

Mr. WELLS. I am not familiar with the particular circumstances, but there undoubtedly are such cases.

So much for what the bill does for irrigation. Whether it should not do something more, in addition to what has already been discussed, is another question. My opinion has always been that the irrigation use should be preferred to the power use. That is the general law of the Western States, and it seems to me to be sound public policy. I think either that should be done by express words in this bill or the State preference law should be followed. In saying that, however, I want to add that I have a case now before the department in which the application of that doctrine would, I think, benefit my client, and, to that extent, I am an interested party. [Laughter.]

Senator ROBINSON. You may be biased.

Mr. WELLS. Yes. I also think that there should be some less harsh remedy than forfeiture to which the Secretary of the Interior might resort if he thought it would fully protect the public. I have in mind court proceedings in the way of a mandatory injunction, or something of that sort, so that the power lessee would not have to choose, before he tried out his right, something he really thought was his right, whether he would stake everything he had on it or not. I think he ought to have a fair chance to try out his right without betting his whole lease on it.

Senator WORKS. Does not that right exist now, Mr. Wells? I suppose an interested party, a consumer, for example, could apply to a court to compel a public utility corporation to perform its duty and

supply the water, or the power, whatever it might be, without any provision for it in this bill.

Senator ROBINSON. But this bill works a forfeiture upon a breach of the condition.

Senator WORKS. Without the action of the Secretary of the Interior?

Senator ROBINSON. No, it requires him to proceed in the courts to have the forfeiture declared.

Mr. WELLS. That is all he can ask the courts to do.

Senator WORKS. I think that ought not to be forced. I agree with you on that.

Senator ROBINSON. The point is he ought to have a less vigorous remedy than that, because there might arise cases in which he wanted to determine whether the lessee was complying with or violating his rights under the lease, untried questions, unsettled questions such as arise under all contracts. And I see a great deal of force in your suggestion, because I know this, that no contract involving many details was ever written which was not liable to a double construction in some of its features.

Mr. WELLS. And the public officer, I do not care how conscientious he is, may be mistaken about what he thinks as to the way it ought to be.

Senator ROBINSON. And, in addition to that, there might be instances where the public would suffer by his exercising the right of forfeiture or applying to the courts for a forfeiture, and where it might work a detriment to the public in some instances that I can conceive of. In other words, there might be found cases where, in the public interests, he would like to take a different course and you think he ought to have the right to do it, and that he ought to have the right to test, by some appropriate proceeding, the right of the party under his lease?

Mr. WELLS. That is my opinion, Senator. That question has arisen in connection with the Alaska coal-leasing bill, and when I was with Mr. Fisher in the Interior Department I worked over the idea; I think it was with reference to the bill introduced by Senator Smoot on that subject. We put in some phraseology the exact language of which I have forgotten as to allowing the Secretary to resort to other appropriate remedies. Something of that sort, it seems to me, would be advantageous here, because as you say, Senator, the Secretary of the Interior might be confronted with a proposition as to whether he should absolutely forfeit the lease or do nothing, and he might be almost forced to wink at violations which would not morally justify a forfeiture.

Senator ROBINSON. From the fear of bringing down upon his head the wrath of the people if the violation did not justify a forfeiture.

Mr. WELLS. Exactly.

Senator ROBINSON. Would you, if you feel enough interest in it, suggest the form of an amendment for the consideration of the committee, at your convenience?

Mr. WELLS. I will be glad to do so.

I want to say a word about the jurisdiction of the several departments. I am very emphatically of the opinion that the Forest Service jurisdiction, that is the jurisdiction of the Secretary of Agriculture, should be preserved with respect to the national forests. This whole

movement began in the Forest Service. I may say that the details of it were carried on in my office there from March, 1907, until I left the service, and it is still carried on there in Mr. Merrill's office. No other body of public officials has had so long an experience with this thing and knows so much about it by the teaching of the best schoolmaster, experience. Moreover, the nature of the administration of the national forests is such that if you turn this over to the Interior Department you are going to increase the expense of administration, because the Forest Service must have men on the ground, whether they exercise this authority or not, and if they exercise this authority they can do it at less expense than new men sent on the same ground to work alongside of them, under the Interior Department.

Then I want to call attention of the committee to the attempted delimitation of the jurisdiction of the Interior Department on the one hand and the War Department on the other in section 16. It is there provided that wherever lands have been purchased or acquired for the sole purpose of promoting navigation, the administration of water-power matters with respect to those lands shall be in the hands of the War Department, and shall not be in the hands of the Interior Department.

I think Mr. Finney called attention to a case that arose on the Black Warrior River, and out of that case has grown this attempted definition of jurisdiction. I was the attorney for the company in that case. It was in Alabama. It involved the use of the waters of the Black Warrior River at certain dam sites, where the Government was building dams to improve irrigation on the slack-water principle, and the War Department ruled that they had no authority to give a power permit or lease as to those dams; and thereupon the company had recourse to the Secretary of the Interior, and the question arose whether he, under the act of 1901, as it now reads—you will remember it embraces all kinds of reservations—had authority to issue a permit over such lands. The ruling was that he had that authority; but on the dissent of the War Department nothing was done, and this section of the bill is the result of that case.

Senator WORKS. One of the troubles about that, Mr. Wells, is there are a great many of the streams in this country that are made navigable by law that would not float a skiff.

Mr. WELLS. Yes.

Senator WORKS. Where really the War Department had no jurisdiction at all, and yet there are navigable streams, made so by acts of Congress or the act of the State. So you make your division rather broad there, it seems to me.

Mr. WELLS. I agree with you, Senator, that those cases should not come under the War Department jurisdiction. Now I think that this language here is going to put a lot of such cases under that jurisdiction.

Senator WORKS. I think that will be a mistake.

Mr. WELLS. To give you the instance that is in my mind: The Appalachian and White Mountain National Forests, those purchased under the Weeks law, are all created for the sole purpose of promoting navigation and they are clearly within the War Department jurisdiction under this bill. But I do not think that ought to be so, as Senator Works says.

Senator ROBINSON. Do you think it is necessary to put in the bill any definition of jurisdiction between the two departments, or to leave that as it is now, to be worked out as best it can?

Mr. WELLS. I think, for the reasons Senator Works has stated, that when the general dams bill comes to be passed more care should be taken that it does not then do what Senator Works has said ought not to be done; that is, there ought not to be transferred in that legislation to the War Department jurisdiction over the whole Mississpipi River to its source in the Rocky Mountains.

Senator ROBINSON. But the case we are trying now is this bill, and there is a provision in here which you have impliedly criticised and your criticism has force. Now what I want to know is do you think there ought to be some provision in here or should this provision be taken out entirely?

Mr. WELLS. I would be perfectly satisfied if the provision went out entirely.

Senator ROBINSON. What is the language you suggest ought to go in, so that we may have it in the record?

Mr. WELLS. I think the whole of section 16 might be stricken out, Senator; but I think if that is attempted to be done there will be trouble and there will be difficulty in getting this bill through without having something of that sort in.

Senator WORKS. We will have trouble enough over this bill anyhow without making any more than is necessary.

Mr. WELLS. To avoid trouble I would like to modify section 16 rather than strike it out.

Senator ROBINSON. All right; how will you modify it?

Mr. WELLS. May I again ask for time to submit something on that?

The CHAIRMAN. Yes.

Senator ROBINSON. Your suggestion is valuable to me, and that is the reason I asked the question whether you would strike it out entirely or modify it?

Mr. WELLS. I would be glad to submit something in that connection.

Senator ROBINSON. The difficulty about that is that Congress is constantly making streams navigable that are not navigable in fact. And the whole process of the river and harbor legislation is to make nonnavigable streams actually navigable.

Senator WORKS. Where they really do that, where they are actually navigable, at least by boats, commercially, they ought to be under the jurisdiction of the War Department.

Senator ROBINSON. Necessarily.

Mr. WELLS. What I shall try to do in drafting such a measure is to specify the land upon which this bill operates. Section 16 is correct in trying to define the jurisdiction in terms of land rather than of navigability, but I have in mind some such language as "lands purchased or acquired for the construction of navigation works" or "for the construction of channel improvement works," or something of that sort. However, I would like to consider it a little further.

Now, I have another criticism of section 16, which is not perhaps of very great importance, but I will mention it. It is implied in section 16 that any withdrawal of public lands along a navigable river, such as occurred on the Black Warrior River in order to protect a site where the Government is to build a dam, must be under

the withdrawal act of 1910. The trouble with the withdrawal act of 1910 is that anything withdrawn under that act is subject to mineral location, and I therefore would not admit in this act the implications that come from that. I would say "withdrawn," but not say "under the act of June 25, 1910." I would strike that out of the bill.

Senator ROBINSON. Have you any other criticisms of the bill? I want to ask you one or two questions if you have finished.

Mr. WELLS. I was only going to say, right along the line I have been discussing and in view of what was said this morning—I think in reply to your question, Senator Norris—that the whole matter of departmental jurisdiction, if we are to pass separate bills, one for the War Department and one for the Interior Department, and so on, could be harmonized by a quasi-official commission appointed from the several departments, to harmonize the policy.

Senator ROBINSON. It would require no legislation for that?

Mr. WELLS. I think that could be done until such time as Congress is ready to pass a bill creating a water-power commission that would take over the whole thing, national forests, Government reservations, navigable rivers, and all the rest of it.

Senator ROBINSON. What would you say as to the provision forbidding the sale, except on certain conditions, to distributing companies of power that is developed? It has been claimed by parties at this hearing that such provision would make the bill unworkable; that in many of the developments possible under the bill it will be necessary and the most economic way of using the power, to dispose of it to distributing companies?

Senator WORKS. Mr. Wells discussed that, I think, Senator, before you came in.

Senator ROBINSON. Oh, no, he had not discussed that at all. You have not discussed that, have you, Mr. Wells?

Mr. WELLS. Only the 50 per cent limitation. I think that is the only thing.

Senator ROBINSON. Yes; but that is an entirely different proposition.

Senator WORKS. Then I am mistaken about that.

Senator ROBINSON. I agree with you so far as the 50 per cent proposition is concerned.

Mr. WELLS. I think it is true that the business of distributing as separated from the business of producing is growing. I think the census reports on this subject show that, and I think you must keep in mind that it will grow further.

However, there are difficulties in not giving any authority over such contracts. The first difficulty is the one of collusive contracts and collusive sales. A collusive sale might work harm in one of two ways if the persons who ultimately get hold of such a grant were evilly disposed. It might work by putting up the price or putting down the price, and the public might be beaten in one way or the other. And although I am not by any means as positive about it as I am about some other things in the bill, yet I am inclined to believe that some such restriction as is now expressed in the bill should be retained.

Something has been said here about the revocations that were made March 2, 1909, and their effect on the whole situation and on the power companies. I am fully cognizant of that situation, and I

would like to say a word or two about it. The revocation orders were drafted in my office. The form of order was the same in all cases and will be found as Exhibit Q in the House hearings, at page 717, and a list of the cases to which that form was applied will be found in Exhibit C, on page 505.

Now, I want to say that that was not the origin of the dissatisfaction that the power companies had with the revocable permit. The dissatisfaction was two years old, or more, when that thing was done. It began with the first attempt to exact anything in the nature of a rental charge, and the controversy about rental charge began in 1906 and continued until the opinion of the Attorney General advising the Secretary of Agriculture that he had authority to impose such a charge was rendered in the fall of 1907. That was followed by a bitter controversy over legislation here in Congress, which lasted from 1907 to 1908, and all of those things happened before those revocations. So, I say, the revocations was not the cause of the dissatisfaction. Secondly, those revocations were followed by Secretary Ballinger's revocation of the Hetch-Hetchy permit to the city of San Francisco, and I am informed and am of the opinion that that was a great deal more disturbing to vested interests than anything we did.

Now, it has also been intimated here that the Interior Department had held that the revocable water-power permit gave permanent rights.

Senator ROBINSON. And that that was the understanding when the bill was passed?

Mr. WELLS. Yes; that that was the understanding when the bill was passed.

Senator ROBINSON. That when the construction had proceeded to completion that thereafter rights were vested and the permit became irrevocable?

Mr. WELLS. Yes, that has been intimated here; if I recall.

Senator ROBINSON. And the statement was made by one witness at least.

Mr. WELLS. So far from that being the case, the Interior Department had held, or, rather, in its regulations it had provided that such a permit was subject to be defeated by any entry of the land, and if such a permit were granted and a homesteader or mineral claimant or anybody else came in and put a claim upon the land, upon the patenting of that claim the permit ipso facto lapsed.

Senator WORKS. That it amounted to an ouster?

Mr. WELLS. Yes, amounted to an ouster. That was their regulation. Now the Forest Service contested that regulation and said inasmuch as it was doing the regulating in the forests, that such was not to be the rule there. And I remember advising the attorney of the Southern California Edison Co. that that would be our holding, and that was our holding. I advised him to resist attempted blackmail by pretended mineral claimants along his line of conduit, and assured him that he would have the full backing of the Agricultural Department in so doing. And I will further say that when I was in Secretary Fisher's office I drafted a change of the regulation and that the rules and regulations of the Interior Department as they exist now give the power permittee a right good against everybody but the United States. I do not think there can be any question whatever about the facts I am telling you.

Now I want to say, further, it is intimated that we did something without a hearing. I want to refer to that order, and it was drafted with care. It recites the facts, recites that the existing permits issued by the Secretary of the Interior before the land was included in the forests did not require the permittee to make any payments to the United States in consideration for the use of the right of way, and then it goes on to say it is the policy and uniform practice of the Department of Agriculture, in issuing permits for the use of the national forest lands for storing, conducting, and using water for generation of electric energy for sale, to require the permittees to pay to the United States a reasonable sum as operation charges in consideration for such use, and that it is the policy and practice of the Department of Agriculture also to place all like users of the national forest lands on a uniform basis in respect to the conditions and requirements under which they enjoy such lease.

Therefore, what was done was to place all permittees on a uniform basis and that basis had been worked out in specific cases to the satisfaction of the parties involved in that case and on a basis that was believed to be, and I think you gentlemen will agree to be, just. I therefore think there is nothing in the charge that we deprived anybody of any rights without a hearing. Moreover, this did not injure any vested rights or appreciably affect the value of any investments theretofore made. What that order did was to require persons who had such permits and had made developments to come in and take a permit in the then existing form, and the burden that was imposed upon them is found, not in the present form of permit, but in the permits under the then existing form, of which I have a copy here that I would like to put in the record.

UNITED STATES DEPARTMENT OF AGRICULTURE.

FOREST SERVICE.

....., Uses.
(Name of forest.)
....., Power.
(Name of applicant.)
....., ...
(Use applied for.) (Date of application.)

Power agreement.

CLAUSE 1. The ..... Company, hereinafter called the permittee, a corporation organized and existing under the laws of the State, or Territory, of....., and having its office and principal place of business at ....., in said State, or Territory, hereby applies for permission to occupy and use certain lands of the United States and rights of way reserved by the United States within the .... National Forest, by constructing, maintaining, and operating thereon, for the purpose in this clause below set forth, the following works:

(Cancel such of the three following items (*a*), (*b*), (*c*) as may not be applicable.)

(*a*) ..... dam- approximately ..... feet in height, respectively; and ..... reservoir- to flood approximately..... acres, whereof approximately ..... acres are National Forest land;

(*b*) ..... conduit.. approximately ..... miles in length, whereof approximately ..... miles will lie upon National Forest land or land within National Forests over which a right of way for ditches or canals, constructed by the authority of the United States is reserved by the act of August 30, 1890 (26 Stat., 391).

(*c*) ..... power house.. and appurtenant structures to occupy approximately ..... acres, whereof approximately ..... acres are National Forest

land; all approximately as shown on .... certain tracing.., executed by .....
.....
.....
on .....
19.., respectively, filed in .....
..... on .....
....., 19.., respectively, and marked by the designation hereto prefixed, which tracing ..... hereby made a part of this instrument.

The works for which a permit is hereby applied for are to be constructed, maintained, and operated for the purpose of storing, conducting, and/or using water for the generation of electric energy.

The permittee does hereby, in consideration for the permit hereby applied for, promise and agree for itself and its successors to comply with all regulations and instructions of the Department of Agriculture governing National Forests, and especially with the following conditions:

CLAUSE 2. The permittee shall pay to the ..... National Bank of ..... (United States depositary), or such other Government depositary or officer as shall hereafter be duly designated by the United States, to be placed to the credit of the United States, a construction charge of ..... dollars ($.....), annually in advance from ..... until the beginning of the use, for the purpose aforesaid, of the work or works for which permit is hereby applied for, being at the approximate rate of one dollar per acre and five dollars per mile for the land occupied by said works, at which time the permittee shall be entitled to a credit toward the operation charge hereinafter provided for; of part of such annual construction charge, so last paid, proportionate to the remaining part of the year for which such last payment was made; and annually thereafter a net operation charge fixed by the forester and calculated as follows: The gross operation charge for any year shall be calculated by the forester upon the basis of the quantity of electric energy generated in such year at a maximum rate which shall not exceed the following amounts per thousand kilowatt hours (KWH):

	Cents
For the 1st year	2
For the second year	4
For the third year	6
For the fourth year	8
For the fifth year	10
For the sixth to 10th years, inclusive	12½
For the 11th to 15th years, inclusive	15
For the 16th to 20th years, inclusive	17½
For the 21st to 25th years, inclusive	20
For the 26th to 30th years, inclusive	22½
For the 31st to 35th years, inclusive	25
For the 36th to 40th years, inclusive	27½
For the 41st to 45th years, inclusive	30
For the 46th to 50th years, inclusive	32½

CLAUSE 3. From the gross operation charge for any year, calculated as aforesaid, deductions shall be made as follows:

(*a*) A sum bearing approximately the same ratio to one-half such gross operation charge as the area of unreserved lands and patented lands on the watershed furnishing the water stored, conducted, and/or used in the works for which permit is hereby applied for bears to the total area of the watershed, as of the beginning of each year;

(*b*) A sum bearing approximately the same ratio to one-half such gross operation charge as the length of the conduit, for which permit is hereby applied for, upon unreserved lands and upon patented lands, over which a right of way for ditches and canals is not reserved by the act of August 30, 1890 (26 Stat., 391), bears to the total length of such conduit, as of the beginning of each year;

(*c*) A sum bearing approximately the same ratio to the balance remaining after said deductions "*a*" and "*b*" as the quantity of electric energy generated from water stored artificially by the permittee, over and above what is generated by the natural flow, bears to all electric energy generated.

The sum remaining after all the aforesaid deductions have been made shall be the net operation charge for such year.

Provided: That the term "unreserved lands," as above used in this clause, shall be deemed and taken to mean lands of the United States not reserved as a part of any National Forest, and that this permit shall not affect such lands or restrict in any manner the right and duty of the United States to control the occupancy and

use thereof through the department or officer lawfully charged with their custody or control.

Provided further: That the term "patented lands," as above used in this clause, shall include all lands to which title has been perfected in persons, corporations, States, and Territories; also all lands outside the United States.

Provided further: That the word "conduit," as used in this and other clauses of this permit, shall include ditches, canals, pipe lines, and all other means for the conveyance of a flow of water.

CLAUSE 4. The decision of the Forester shall be final as to all matters of fact upon which the gross operation charge for any year, the deductions for such year, and the net operation charge for such year depend.

CLAUSE 5. The permittee shall install and maintain in good operating condition, free of any expense to the United States, accurate meters and other instruments approved by the Forester, adequate for the measurement of the electric energy on which said gross operation charge is to be calculated, and accurate measuring weirs and other devices approved by the Forester, adequate for the determination of the quantity of water used in the generation of electric energy from the natural stream flow and, separately, the quantity of water stored by the permittee so used over and above the natural stream flow; and the permittee shall keep accurate and sufficient records to the satisfaction of the Forester and free of any expense to the United States, showing the quantity of electric energy generated in each year, the quantity of water used in such generation of electric energy from the natural stream flow and, separately, the quantity of water stored by the permittee so used over and above the natural stream flow; and the authorized agents of the Forest Service shall at all times have free access to the aforesaid meters, weirs, instruments, devices, and records of the permittee. In case the permittee fails for any year to so install and maintain such meters, weirs, instruments, and devices and to keep such records, the Forester shall fix by estimate the amount of the gross charge and of the deductions for such year, using such information as he can readily obtain.

CLAUSE 6. If the United States shall hereafter, for permits of this nature in national forests, reduce the general scale of maximum rates below those above provided for in clause 2 hereof, or shall wholly abolish charges for permits of this nature, then and thereupon the charges to be calculated and fixed hereunder, as provided in clause 2 hereof, shall be reduced or abolished in like degree.

CLAUSE 7. The permittee shall pay to the United States depositary or officer, as above set forth in clause 2 hereof, the full value of all merchantable live or dead timber cut, injured, or destroyed in the construction of the said works, title to which, at the time of such cutting, injury, or destruction, is in the United States, according to the scale, count, or estimate of the forest officer in charge or other duly authorized officer or agent of the United States, such full value of timber cut, injured, or destroyed in the construction of said works shall be deemed and taken to be, and payment therefor shall be made in advance as required by such forest officer or other duly authorized officer or agent of the United States.

CLAUSE 8. The permittee shall dispose of all brush and other refuse resulting from the necessary clearing of or cutting of timber on the lands occupied under the permit hereby applied for as may be required by the forest officer in charge.

CLAUSE 9. The permittee, its employees, contractors, and employees of contractors, shall do all in their power, both independently and upon the request of the forest officers, to prevent and suppress forest fires.

CLAUSE 10. The permittee shall, on demand of the District Forester, or other duly authorized officer or agent of the United States, pay to the United States depositary or officer, as above set forth in clause 2 hereof, full value as fixed by such District Forester, or other duly authorized officer, for all damage to the National Forests resulting from the breaking of or the overflowing, leaking, or seepage of water from the works constructed, maintained, and/or operated under the permit hereby applied for, and for all damage to the National Forests caused by the neglect of the permittee, its employees, contractors, or employees of contractors.

CLAUSE 11. The permittee shall build new roads and trails as required by the forest officer, or other duly authorized officer or agent of the United States to replace any roads or trails destroyed by the construction work or flooding under the permit hereby applied for, and to build and maintain suitable crossings as required by the forest officer, or other duly authorized officer or agent of the United States, for all roads and trails which intersect the conduit, if any, constructed, operated, and/or maintained under the permit hereby applied for.

CLAUSE 12. The permittee shall within ..... months from the date of approval hereof, begin bona fide construction of the works for which permit is hereby applied for, and shall, within ..... years from the date of said approval, complete such

construction and begin to operate said works for the purpose in clause 1 hereof set forth unless the time is extended by written consent of the forester; it being understood that such consent will usually be given only because of physical obstacles to construction, such as floods or engineering difficulties which could not reasonably have been anticipated.

CLAUSE 13. In constructing any dam or reservoir under the permit hereby applied for the permittee shall follow the usual precautions in the ordinary methods of dam construction. This obligation, however, shall not be construed so as to relieve the permittee from any requirement of State law regarding the construction of dams and storage of water.

CLAUSE 14. The permittee shall sell electric energy to the United States when requested at as low a rate as is given to any other purchaser for a like use at the same time: *Provided*, That the permittee can furnish the same to the United States without diminishing the measured quantity of energy sold before such request to any other consumer by a binding contract of sale: *Provided further*, That nothing in this clause shall be construed to require the permittee to increase its permanent works or to install additional generating machinery.

CLAUSE 15. The permit hereby applied for shall be nontransferable (U. S. Rev. Stats., sec. 3737) and shall be subject to all prior valid claims which are not by law subject thereto.

CLAUSE 16. No Member of or Delegate to Congress shall be admitted to any share or part of this agreement or to any benefit to arise thereupon. (U. S. Rev. Stats., secs. 3739 to 3742, inclusive.)

CLAUSE 17. No person undergoing a sentence of imprisonment at hard labor imposed by any court of the several States, Territories, or municipalities having criminal jurisdiction shall be employed in the performance of this contract. (Executive Order, May 18, 1905.)

CLAUSE 18. The permittee shall, except when prevented by the act of God or the public enemy or by unavoidable accidents or contingencies, continuously operate for the generation of electric energy the works to be constructed under the permit hereby applied for, in such manner as to generate after such generation begins, not less than the following percentages of the full hydraulic capacity of the said works measured in kilowatt-hours: In the first year, ... per cent; in the second year, ... per cent; in the third year, ... per cent; in the fourth year, ... per cent; in the fifth year, ... per cent; and in every year thereafter, ... per cent.

CLAUSE 19. If any of the works for which permit is hereby applied for shall be owned, leased, trusteed, possessed, or controlled by any device permanently, temporarily, directly, indirectly, tacitly, or in any manner whatsoever so that they form part of or in any way effect, any combination or are in anywise controlled by any combination, in the form of an unlawful trust, or form the subject of any contract or conspiracy to limit the output of electric energy or in restraint of trade with foreign nations or between two or more States or Territories or within any one State or Territory, in the generation, sale, or distribution of electric energy, the permit hereby applied for shall be forfeited to the United States by proceedings instituted by the Attorney General of the United States in the courts for that purpose.

CLAUSE 20. The permit hereby applied for shall cease and be void upon the expiration of fifty years from the date of approval hereof, but it may then be renewed in the discretion of the duly authorized officer or agent of the United States and upon such conditions as he may in his discretion fix: *Provided*, That such officer or agent in fixing such conditions shall consider the actual value at that time for power and all other purposes of the lands and rights of way within national forests occupied and used under the permit hereby applied for, and the actual value at that time of all improvements lawfully made by the permittee within national forests under the permit hereby applied for, but neither the property of the permittee, if any, outside of national forests nor the permit, franchises, bonds, capital stock, or other securities of the permittee shall be considered in fixing such conditions.

CLAUSE 21. Nothing herein contained shall be construed to prevent the Forest Service from having the same jurisdiction over the lands above specified, including the issuance of further permits, as over other National Forest lands not inconsistent with the occupation and use hereby applied for.

In witness whereof the permittee has executed this application in duplicate at .... on this ..... day of ....., 19...

.....,

(SEAL.) By ....
President

Attest:

....
Secretary.

ACKNOWLEDGMENT.

STATE OF.....
County of.....*ss:*

On this ..... day of ....., 19.., before me, a notary public in and for said county, duly commissioned and sworn, my commission expiring ....., 19.., personally came ....., to me personally known, who, being by me duly sworn, did depose and say that he resides in .....; that he is the ..... of the ..... company; that said company is the corporation which is described in and which executed the foregoing instrument; that he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so fixed by order of the board of directors of said corporation, and that he signed his name thereto by like order; and the said ..... acknowledged said instrument to be the free act and deed of said corporation.

Witness my hand and official seal the day and year first above written.

(NOTARIAL SEAL.) .....,
Notary Public in and for ..... County.

Approved ...., 19.., and permission granted subject to the conditions set forth.

.....,
Forester.

Moreover, they were not put under the conditions of this permit with respect to rental charges, but were given vastly more favorable terms. Those terms were that for a period of 25 years they were to pay a purely nominal charge of 2 cents per thousand kilowatt hours, and after the 25 years they were to be put on the same charge basis as others.

I want to say further that the order specifically legalized and continued their occupation until this transaction could all be closed up, so that they could not be disturbed.

The average price in the year of 1907 received by all commercial electric stations in the United States, per kilowatt hour, as shown by the United States census was 2.8 cents, or $28 per thousand kilowatt hours, out of which we exacted a rental of less than 2 cents, because they had certain deductions expressed in the permit and those deductions in most cases would amount to 50 per cent or more. So that, out of every $28 this was going to take 1 cent—out of $28 gross receipts it was going to take 1 cent.

Now, if that wrecked the Central Colorado Power Co., it must have been in a very shaky condition before it got that terrible shock. I think, since that matter has been referred to, although it is not very important in itself, the committee ought to be informed about what was actually done.

I would say, further, that I have been making some study of the statistics upon the subject of the growth and present condition of this business—such items as the proposed cost of development, the amount of capitalization, the income they get, the profits, etc. But I will not inflict them on the committee at this time, as they are derived from the census reports.

Senator ROBINSON. If you have the tables there, I would like to have you insert them in the record.

Senator WORKS. Yes, if you have them in tabulated form.

Mr. WELLS. I will submit figures derived from the census reports—what they appear to show in regard to the conditions throughout the country, and in one or two typical States on those points, if the committee desires.

Senator NORRIS. I would like to have it, Mr. Chairman.

The CHAIRMAN. All right; you may do that as speedily as possible, Mr. Wells, and give it to the stenographer to be inserted in the hearings before these proceedings are closed.

Mr. WELLS. I may say that for the United States at large, for all central electric stations doing a commercial business, it shows a capitalization of $430 per kilowatt. Mr. Lincoln testified that anything over $200 would be a prohibitive cost. I think the inference ——

Senator NORRIS. That means all are capitalized for twice his figure?

Mr. WELLS. They are capitalized for twice that amount on the average, if the census figures are correct. And I think myself that the knowing water-power men are not very keen about sites where the cost is going to be as high as $200.

Senator NORRIS. It is very possible that in this capitalization you speak of there is a good deal of "water" and that the capitalization does not represent the real cost.

Mr. WELLS. I take it that that is the conclusion to be drawn from the figures.

Senator NORRIS. I suppose in dealing with a water proposition, like we are, where the water is so plentiful on these power sites that the temptation to put water in the capital stock would be very great.

Mr. WELLS. Senator, the business has developed very rapidly. Roughly speaking, it may be said it has doubled every five years, although the pace has been slower of late. The average return on capitalization, so far as I have been able to figure it out, and I offer it with some modesty, because such a thing is bound to have some errors in it, is 3.62 per cent.

Senator NORRIS. Per cent of what?

Mr. WELLS. On the capitalization. The average return on capital, dividends, interest, bonded debt, and charges to sinking fund.

Senator NORRIS. That is, on this capitalization which you said was something over $400 per kilowatt-hour?

Mr. WELLS. Yes, Senator. Now, if we would assume that they had gotten 8 per cent, then I figure their profits to be $15.58 per kilowatt, which is 8 per cent on $194.75 per kilowatt of installation. I am aware that figures drawn from a general mass of statistics like that are to be accepted with reserve. But, nevertheless, I think they may have some weight.

I think that is all I have to say.

The CHAIRMAN. Are there any other questions?

Senator ROBINSON. Your statement has been very interesting to me.

Senator WORKS. Yes.

Senator NORRIS. Can you not get that table in so that it will be placed in the testimony?

Mr. WELLS. I will get it in a form to be placed in the record.

(The statistical statement requested by the committee is as follows:)

Tabular statement of growth, book cost, capitalization, earnings, expenses, and profits of central electric stations, deduced from the official publications of the United States census, viz: Special report, 1902, on central electric light and power stations, special report, 1907, same subject; Bulletin 124, 1912, same subject.

NOTE.—The statistics here used omit central stations operated in any one of said years by electric railways except in cases where "it was practicable to secure a separate report for the central-station work." (Bulletin 124, p. 9.) The figures here used

also omit stations operated by hotels, manufacturing and mining corporations, and others which consume their own current; also central stations operated by the Federal Government, notwithstanding the commercial character of some of them, as, for example, those operated by the Reclamation Service. The results in the following tables are approximate, and are therefore given in round numbers.

TABLE 1.—*Percentage of growth: All commercial and municipal central electric stations.*

	1902–1907	1907–1912	1902–1912
	Per cent.	*Per cent.*	*Per cent.*
United States; kilowatt capacity of dynamos	122	90	323
Maine; kilowatt capacity of dynamos	157	49	284
New York; kilowatt capacity of dynamos	156	60	312
Colorado; kilowatt capacity of dynamos	144	35	228
California; kilowatt capacity of dynamos	185	146	610
United States; output in kilowatt hours	114	97	360
Maine; output in kilowatt hours	210	77	435
New York; output in kilowatt hours	107	49	210
Colorado; output in kilowatt hours	105	34	170
California; output in kilowatt hours	333	164	1,040

TABLE 2.—*Primary power—Ratio of water power to steam.*

	1902	1907	1912
United States; commercial and municipal stations	100:318	100:199	100:200
United States; commercial stations	100:286	100:286	100:220
Maine; commercial stations	100:87	100:41	100:27
New York; commercial stations	100:144	100:65	100:123
Colorado; commercial stations	100:196	100:124	100:72
California; commercial stations	100:67	100:45	100:94

TABLE 3.—*Capitalization outstanding of commercial stations per kilowatt of dynamo capacity.*

	1902	1907	1912
United States (a few stations not reporting 1907 and 1912), total	$568	$537	$430
United States, funded debt	230	240	188
United States, capital stock	338	297	242
United States, common stock	316	266	205
United States, preferred stock	22	31	37

TABLE 4.—*Alleged "cost" of construction and equipment per kilowatt of dynamo capacity.*

	1902	1907	1912
United States, commercial stations, water power only	$300	.....	.....
United States, commercial stations, water and steam power	540	.....	.....
United States, commercial stations, steam power only	435	.....	.....
United States, commercial stations, all prime movers	440	$422	$440
United States, municipal stations, water power only	213	.....	.....
United States, municipal stations, water and steam power	207	.....	.....
United States, municipal stations, steam power only	194	.....	.....
United States, municipal stations, all prime movers	195	205	289
United States, all hydroelectric stations (28 per cent steam power)	.....	.....	473
New York, commercial stations	.....	.....	457
California, commercial stations	.....	.....	590
Washington, commercial stations	.....	.....	680
New York, municipal stations	.....	.....	200
California, municipal stations	.....	.....	293
Washington, municipal stations	.....	.....	187

TABLE 5.—*Gross receipts from sale of current per kilowatt of dynamo capacity.*

	1902	1907	1912
United States, commercial stations	$70.00	$62.80	$55.80
Maine, commercial stations	43.50	32.65	30.30
New York, commercial stations	90.00	71.50	60.00
Colorado, commercial stations	74.50	62.50	65.00
California, commercial stations	58.50	56.00	44.50
United States, hydroelectric stations			37.20
Maine, hydroelectric stations			25.00
New York, hydroelectric stations			35.60
Colorado, hydroelectric stations			39.20
California, hydroelectric stations			43.90
United States, water power exclusively	31.00		
Maine, water power exclusively	36.50		
New York, water power exclusively	39.00		
California, water power exclusively	28.50		

TABLE 6.—*Gross receipts from sale of current per kilowatt-hour of output.*

	1902	1907	1912
United States, commercial stations	$0.0335	$0.028	$0.024
Maine, commercial stations	.03	.0191	.0152
New York, commercial stations	.0239	.0234	.0242
Colorado, commercial stations	.027	.0267	.0276
California, commercial stations	.0322	.026	.0169
United States, hydroelectric stations			.0124
Maine, hydroelectric stations			.0111
New York, hydroelectric stations			.0186
Colorado, hydroelectric stations			.0161
California, hydroelectric stations			.0154
United States, water power exclusively	.0155		
Maine, water power exclusively	.0208		
New York, water power exclusively	.0060		
California, water power exclusively	.0152		

TABLE 7.—*Profits, i. e., dividends, interest on funded debt (estimated), and charges to sinking fund, per kilowatt of dynamo capacity and per cent of outstanding securities for commercial stations, 1912.*

	Per kilowatt.	Per cent.
United States:		
Dividends (a few stations not reporting)	$7.25	2.99
Common stock (a few stations not reporting)	6.00	2.93
Preferred stock (a few stations not reporting)	1.25	3.39
Bond interest (estimated)	8.07	4.3
Charges to sinking funds	.26	0.14
Total divided profits	15.58	3.62

STATEMENT OF MR. DENNIS T. FLYNN, BANKER, OF OKLAHOMA CITY, OKLA.

Mr. FLYNN. Mr. Chairman, and gentlemen of the committee, I thank you for your kindness, and, having been a Member of the other branch for a number of years, I want to compliment you upon what I think has been the attention and patience you have given the hearings so far in this matter.

I desire to approach this subject, not from the standpoint of a man who professes to know all about water power or how to make k. w's out of these waters and lands, but from the standpoint of one who has been interested in electrical properties and who has purchased

for his own use and benefit electrical securities; who is not a dealer nor a broker, but one who has tried to follow up this question and who believes that an exception should be made in his case whenever these philanthropic gentlemen, who say they represent 90,000,000 people, come before committees of Congress. I disagree in the main with their views. I reserve the right to always represent myself and not be included by these so-called public-spirited gentlemen who are undertaking to tell, on my behalf, and the behalf of others, what ought to be done to regulate somebody else's business.

I will say to the chairman and the committee that whether this bill was up or not, this winter I expected to put in the winter in Washington.

I have retired from active business. I have tried to be practical, but I am not in sympathy with views of gentlemen who are telling you about what restrictions you should make which will place beyond the reach of the American boy who is not governed by an 8-hour law but who works 23 hours out of the 24, that if he accomplishes something, it is his, and that he is not a malefactor or grafter of great wealth. I went west 30 years ago with another boy with a yoke of cattle and covered wagon and without a friend west of New York. I have lived in that country ever since, and I think the only hard thing it ever did to me was to send me to Congress for eight years. But I am relieved from that difficulty now, because when statehood was granted the view was taken that anybody that held the political views I did should be left in Oklahoma.

Now, Mr. Chairman, with that preface, permit me to begin by saying that I am not in sympathy with the criticism that has been made here, that because men know something about this subject from a practical standpoint they are to be classed in the Water Power Trust. I want to say to this committee that the most gratifying thing to me, from a fundamental standpoint and as a citizen has been demonstrated here the first time in years. Men have come voluntarily before this committee who are representing ten, twenty, fifty, and one hundred millions of dollars, showing that they have faith in the committee and in the country, and that they believe the day of the muckraker has gone by, and that men who represent great capital can be heard in these halls of legislation of their country. I do not belong to the class that runs up in the millions. It has been charged that I have been fortunate. Yes, I have. But, as I say, I have been fortunate simply because, by industry and attention, I have tried to accumulate a little money.

I own now some securities that will be affected by this bill. I want to know when I lock them up that they are mine and that I am going to get the principal back. Therefore, when the statement is made here of men who come and entertain divergent views from other gentlemen that they represent the Water Power Trust, I say it is unfair. The committee and men who are interested in this subject have a right to be heard. If you want a law, are you going to a doctor? No; you are going to a lawyer, because he knows something about it. And if you want to buy groceries, you are going to a grocer, and if you want to develop water powers and to get the facts, you are not going to a blacksmith; you are going to the man who knows something about water-power propositions.

The Secretary of the Interior in his last report made the statement that there was a feeling in the West of dread that there is a bureaucracy growing up in Washington and that the people of the West are dreading it, and that it is his desire to dispel that delusion. In my judgment if this bill as it passed the House should go on the statute books it means an increase of bureaucracy, more clerks in Washington, the expenditure of more hard-earned dollars of the man who undertakes to make development by compelling many a lonely pilgrimage to the shrine of the Interior Department. Do not think for one moment, Senators, please, that I have any criticism of any man who is in any of those offices as far as the policy of the Interior Department is concerned. It has changed so very little during the time I have been familiar with it that if I were to state who were the most liberal men for the West I would name an Eastern and a Western Secretary of the Interior—Senator Teller of Colorado and Cornelius N. Bliss, of New York. Ever since that time there has been, in my judgment, very little variance in the view of the various Secretaries of the Interior as far as the western country is concerned.

The first thing I would like to ask is this: Why do you want to put more of a hardship on the man who developes water power on Government land than you do on the man who has title to all of his property and is developing it in competition? The men who have water powers on private lands are regulated by the States. Yes. But a man under this bill, who forsooth, may want a right of way over 20 acres for a project involving 10, 15, or 20 million dollars, first must be taxed by the Secretary of the Interior and then be subject to all the conditions contained in this bill, which I will enumerate as I take it up.

With reference to the suggestion made—I think it was by Senator Norris and, if you will pardon me, I think probably he got the thought from the hearings before the House committee—the statement was made, if I remember correctly, that if you had a steam property generating in one place and the water-power man comes in and they both desire to supply the same community, that the State commission in fixing the rate, even though the water power, we will say, costs 50 per cent less than the coal, will probably fix the water-power rate high enough so that the coal men could operate at a profit and at the same time, therefore, the water men would receive a great deal more profit.

The CHAIRMAN. Mr. Flynn, I do not know that this is particularly an opportune time, but I might as well now as at any other time. I want to ask you to express your view about one thing in paritcular that has been in my mind a great deal, and that I would like to have you clearly explain to me, if you will, and I am sure you can, and that is this: It appears that the people who make water-power investments do not like the present law and the present arrangement because they say that the Secretary of the Interior can give only a revocable permit and they are at his mercy. They have not liked the present law for years. I have heard a great deal of complaint about the present law, that it was unsatisfactory and unstable and put the whole power in the Secretary of the Interior, and that it was uncertain and they could not get people to invest their money in it.

Now, on the other hand, there seems to be a considerable feeling that the water-power men do not like the present bill because there

is too much regulation in it and too many requirements and regulations.

What occurred to me and what I would like you to tell about is this: If those who make water-power investments do not like the present law, and if they do not like this proposed law, what is it they do want? What would they have?

Mr. FLYNN. Senator, if I had my way, all I would do would be to grant the same right over the public lands that the States grant over State lands the right of condemnation.

The CHAIRMAN. Without any regulation?

Mr. FLYNN. No, sir. I am one of the strongest advocates of regulation there is in this country. But I say to you in the beginning that you should not pass this bill applying to interstate corporations that deal only with Government property and leave the corporation that is doing an interstate electric business on private property go free, withhold congressional regulations.

Let me go back, Senator, to the first act you mentioned, that is the revocable permit. Secretary Fisher and I both went before the House committee and agreed on some things. He said the great trouble the department had with reference to carrying out rules and regulations under that act was the fact they had to draft general rules and regulations. Now this act carries the same proposition, that the Secretary is empowered, by general rules and regulations, If Mr. Fisher's objection to the general regulations in the revocable permit were valid, they ought to be in this. And that will lead me now to a question Senator Robinson asked of a witness, if he will pardon me for quoting him. He said, as I understood, to a witness "Don't you know about the Spokane lease," discussing the 50 per cent provision, "That the 50 per cent restriction was in that lease and the man took it?" I do not want to misquote you, Senator, but I believe that is correct. And that man has not been able to raise 30 cents, and I believe if the permit were not revocable and that the same provisions in this bill were in that lease, that then he could not raise 30 cents.

Do you know how those things are financed? Then, if not, let me in a homely way say something about how these things are cared for.

Senator ROBINSON. I would be very glad to have your explanation about it.

Mr. FLYNN. I am interested, Senator, and have been down in your State. The average man thinks that these public service corporations (I won't say that is the Senator's view) are to issueing a lot of bonds and stocks and that the fellows go out and float them, and that they issue so much that thereafter the rates must be raised in order to return an income on whatever is issued. You start a property and suppose, as in my State, your commission has no authority to regulate your stock and bonds. You buy a piece of property, or you go in and build a property and issue bonds. I do not care whether you have a commission that regulates the price at which you should sell your bonds or not. The market takes care of that. In my experience, down in Oklahoma, we have never been able to sell our bonds in Oklahoma. We began in the early days by selling public service bonds at 75. We could not sell a solitary one of them in the community in which we lived, because they only bore 5 per cent and the fellow figured on 8 or 10 per cent at home, or going and buying

a town lot that probably would increase 100 per cent in 8 or 10 months. Now, I have seen gentlemen before this committee none whom had I ever seen before, except Mr. Pierce. Now, you go trotting around to try to get a market for your securities. I come to you and I say, "Senator, here is a bond (of a water, gas, or electric property) that I think is absolutely all right." "What do you ask for it?" "$75." "Well, I do not know; something might happen. I can go over here and buy Pennsylvania stocks (or something else), and know that all I have to do is to lock them up and cut my coupons." Now, what have I got to do? I say to him, "Now, if you will take a bond I will give you 25 per cent in stock." Maybe you can get him to take it at that. But when you come to pay taxes, do you know what they do with corporations in some States? The corporation commission permits you to earn on the physical value of the property, but the equalization board finds how many bonds you have out, how much stock you have out, and they proceed to tax you on that valuation, instead of the one you have your earning capacity on.

Well, we will say I have a property and I have sold enough of those bonds to try and get in out of the wet. I go ahead with it and the town begins to increase. Suppose I buy a property, and I have an issue of $300,000 worth of bonds out and the growth of the town is such that on my gross receipts, without paying anything, they are not sufficient to keep up with the regulations of the city council. We have a commission form of government now. With us the city council controlled the franchise. Now you go on, and you can not get money, and your bond issue is closed. Say you have issued $500,000 of bonds. You can not sell your notes, and what have you got to do? You have got to buy in those bonds. There is usually a provision in the bonds that at a certain time you can buy them back, say at $105 or $102 or something of that kind In other words, the man has a bond, even the fellow who paid you $75, and you have to give him back so much bonus in order to get the bond in. But you can not get them all in. Now you propose to issue a million dollars of bonds. I have had this very experience where there was $300,000 underlying first-mortgage bonds that we could not buy in. So we reorganized and arranged to issue a million, with $300,000 of these bonds outstanding. Now, if you were to read a published statement of the bonds out you would be of the opinion there were a million and three hundred thousand of bonds out, when, in reality, there were only a million out, because you do not dare sell the million. You can only sell $700,000 of them. You fudge along the best way you can, you get money, and every time the city council meets they say, "Now, Bill Smith up here and Tom Jones out there he says he wants a light out there on his corner, and there ought to be electric lights put out there." Well, the best thing you can do, if you are practical, is to do what either the city council or the corporation commission tells you to do. If you do not, it will be so unpleasant for you that you would wish you were out of the business.

We went on, our town kept growing, and it was not very long (this was an exceptional case, Oklahoma City), and at the end of three years we had invested all of our $700,000 and we were at the limit and the town kept growing. When we went in it was a town of 10,000. I was there, of course, when it was nothing but a prairie and it did not have 10 people. We reorganized when it was 18,000.

Well, the town jumped to 70,000 and, instead of having an authorized bond issue of a million, we had to get permission to increase it to five million. We had been burnt so often in this reorganization that we had to provide for a sufficient issue, but which we could not handle ourselves. Why? When you issue these bonds, you do not have them. They are deposited in a trust company, with a trust officer, and not a solitary one of those bonds can be taken out from under his control without showing the amount of money that you have expended. And if you expend a dollar they won't give you down a dollar bond; they will give you down about 80 cents in bonds. So that you have to be putting in, of your own money, or earnings on the property 20 cents more. So that the bonds, as a matter of fact, represent more in reality than the face of them.

Now, then, when you go along that way, at this date, they are putting another restriction in. They put a restriction in prohibiting you from taking bonds even at 80, unless you can show that the net earnings for the extensions you are making will be equal to at least twice the interest on the amount of the bonds issued. Well, a banker gets the bonds. He does not stop there. No. He sells them to me and he sells them to you and to the other fellow. Well, the public belief is that when he unloads those bonds he is through; that he is ready for another crop of suckers. But that is not the way it works. That bond house that sells you that bond gets monthly reports from the operation of the company. They get affidavits verified about all the earnings and everything of that kind. And they do not stop there. About twice a year they send their own experts down there to go over all of your books and watch your property. Why? Simply because if the bond he sold you ever turns out bad you would not do anything but roast him for the balance of your natural life, and he never could sell you or your friends any more.

Let me give you an illustration of an experience I had. Talking about this $5,000,000 of bonds we had to authorize on account of the growth of the town, we have a law in Oklahoma which provides (that, at least, was our construction of it) that we could secure a franchise for 25 years. Our law has taken the power away from the city council to grant franchises under the commission form of government which we now have. All we can do is to call an election and submit the franchise to the people, and if the people vote the franchise, well and good; if they do not, why that is the end of it. The people voted a new franchise, because the old one would expire in 5 or 6 years and we could not finance a penny on a 5, 6, or 10 year franchise. We issued our bonds for 25 years, in compliance with the election called and vote of the people. A bond house had agreed to take $2,000,000 of those bonds. When we went to deliver the bonds they referred all the papers to their attorneys, and their attorneys said, "No; nothing doing. You only have a right to grant a franchise for 21 years."

We brought a friendly suit in our supreme court, and the State court sustained our contention that it was 25 years. I hurried East in the happiest frame of mind to tell them to compliment us.

Senator CLARK. Was that because of some prohibition in your State constitution, or upon what was that based?

Mr. FLYNN. Oh, no; it was the law. It was a different construction, as to whether or not it was 25 years or 21 years.

I went down there with the bonds, you know, tickled to death. Their lawyers said, "Nothing doing." I said, "Here is the decree." They said, "That is all right; but you don't get our money on anything but a 21-year franchise." Now, what did we have to do? We had to go right back and get the city council together again, give 30 days' notice, call another election, and then vote for a 21-year franchise before we could raise a dollar. Therefore I say, when people tell you under this bill you can get the money, the statement is made invariably by men who never were interested in the practical side of it, who never either invested a dollar themselves or had to raise a dollar to develop a power.

Now, we are just about in the same fix under this bill that the Secretary of Interior is. As I view this bill, the present bill, we are confronted with about the same proposition that I was when I went to those bankers. You can take it or leave it. Do you know that of all the investors in the United States only about 5 per cent can be tempted to touch electric securities at all? And natural gas securities, of which we have some down in your State, you can not sell natural gas bonds, as a rule, any place in the United States except Pittsburgh, because they are acquainted with them there.

Take it down in your State of Arkansas. The impression is attempted to be conveyed, not by anybody before this committee, but in the country generally, that a corporation which is operating one of these public-service utilities is a grafter; that there is millions in it; that they have no sympathy whatever with the consumer. I want to deny that most emphatically, and I want to cite a case right down in your State, Senator Robinson. We bought the gas, electric, and street railroad properties and made a contract for the distribution of natural gas through mains to the consumer at 50 cents a thousand. We had been charging, I think, $1.25 for artificial gas. What was the consequence? We advertised and plugged for natural gas the best we knew how. We sold a small quantity, but our receipts were a great deal less, and our profits were nil. A company was organized on the side to go out and see if it was not possible we tried to get the person who furnished us natural gas to reduce the price of his gas, so that we could distribute it at 25 cents. We could not do it. He said he had all the natural gas in that section that could be used. He had all the anticlines, he said. This new company went out and sunk about $30,000 and discovered another natural gas-field, and made a contract with our company to distribute it to the consumers at 25 cents a thousand.

I speak of that simply to show that the corporation itself is interested in getting along with the public and lowering rates.

Take it in my home town, in Oklahoma City, I know when natural gas was struck in the Tulsa field. I was president of the Oklahoma Gas & Electric Co. at that time, and, with my partner, owned it. We were selling artificial gas, and when natural gas was struck a hundred miles from us it was only a question of time when it would come in there, and if we did not distribute it, whoever did would put us out of business, because we could not compete at the price. The city council had granted various franchises to sell natural gas at 35 cents a thousand. We finally applied for a franchise and it was given us. All the others had failed. They had granted 8 or 10 franchises. We

organized a company and piped with a 12-inch pipe line natural gas from 112 miles east and sold it; even though the franchise authorized us to charge 35 cents a thousand, we sold it at 25 cents to house users and at 10 cents to manufacturers.

What was the consequence? We saved ourselves in fuel the first year $18,000, because we put it under our own boilers.

If any one of you had a fear for a moment that the question of water competition and steam competition is a matter in which the Federal Government has got to step in it may be hard to say so, but this is a world where it is the survival of the fittest; and if a man with all of his money in, and I had all of mine in, can not keep up with the regulations and the competition, why, it is his hard luck; that is all there is to it.

I think I mentioned to you the fact that less than 5 per cent of the investors in securities invested in gas and electric light. Mr. Vanderlip, president of the National City Bank of New York, in an address which I read a short time ago, made the statement that electricity was taking $8,000,000 a week, over a million dollars a day, to keep up with at the present, and that it would take, to keep up at the pace they are going to-day, not considering new enterprises, but for those already established, $400,000,000 a year for at least 5 years.

Now, then, if you do not mind, I would like to take up the bill a little.

Of course, I want to say in the beginning that Mr. Fisher this morning was not as radical as he was before the House committee. His statement as I remember in the House committee was that if he believed that it was possible to get a toe hold or a peg in anywhere on any of these properties the Government ought to hold it, ought to regulate it, and so on.

I am inherently against the expression "authorized and empowered" in the bill, and I will tell you why: While I was a Member of the House I was very much interested in opening an Indian reservation in Oklahoma. The House ratified a treaty with the Indians and included an appropriation for the allotment of the lands. I went to the Secretary of the Interior to get him to allot the lands, and he said to me: "I think that is a bad piece of legislation, and I do not agree with it," and he absolutely declined to allot the lands. I waited three years, and finally had to pass an act through Congress directing the Secretary of the Interior to appoint allotting agents to allot those lands and open them up to homestead settlement.

That is why I am against that. That is just one illustration, Senators, showing that if you pass this bill with such a provision in it there is no more assurance that a lease will be made under it than there is at present, or that we will be any better off than we are at present, because the Secretary may use his sweet will as to granting them. I mean no disrespect to the Secretary of the Interior personally; I have met and like him very much.

Senator ROBINSON. Let us look into that proposition for just a moment. This bill, or some similar measure, is known to have been largely prepared in the Interior Deparment, or at the instance of the Secretary, after consultation, as it is alleged, with various persons supposed to be informed on the subject, both practically and theoretically. The department, I imagine, would not want to favor and urge the passage of legislation that was known to be unworkable.

In other words, the Secretary of the Interior would feel an interest in proving the practicability of the proposition which he had urged and fostered, and instead of trying to prevent, delay, or hinder the working of the legislation which he himself was in a sense the father of, it seems to me that he would naturally be interested in demonstrating in every legitimate way its workability. I can not understand how any officer or any private citizen would do otherwise.

Mr. FLYNN. You do not catch my point, Senator Robinson; I agree with you fully that it is the expectation in favoring the legislation that it will be workable; otherwise there would be no use passing it. But I still say that unless the Secretary thought it desirable you could not get anything. A fight was made for an amendment when Congress passed the revocable permit bill; but they said "There is no danger of the Secretary of the Interior revoking those permits"; and yet, two days before ex-Secretary Garfield went out of office he revoked 25 of those permits, and left many men flat broke.

Senator STERLING. That was under the terms of a law which permitted them to be revoked.

Mr. FLYNN. Certainly.

Senator ROBINSON. I do not think anybody can assume that legislation passed by Congress was not to be invoked in any case; nor are you warranted in assuming that the Secretary will not fairly apply this law unless it is repealed.

Mr. FLYNN. You do not catch my point, Senator——

The CHAIRMAN (interposing). This law would prevent an arbitrary revocation of a permit, would it not?

Senator ROBINSON. The Secretary has no power under this bill to revoke it at all.

Mr. FLYNN. I do not think you catch my point. My contention is that he is "authorized and empowered" to issue leases; I contend that Congress should "direct" him what to do. Of course, I may disagree with the committee on that.

Senator ROBINSON. You refer to the fact that he is merely authorized to grant permits, do you?

Mr. FLYNN. Yes; that the bill does not make it mandatory.

Senator ROBINSON. And your suggestion is that you do not know that he will ever grant one lease under this provision?

Mr. FLYNN. Yes, he may not; it is optional with him.

Senator CLARK. Right on that question of revocability of the permit, I was not present when ex-Secretary Fisher spoke upon that question; and I do not know whether he made the same statement here that he made before the House Committee.

My understanding was that many of those revocable permits had been revoked without cause assigned by the Secretary of the Interior. Now, Secretary Fisher said before the House committee that, so far as he knew, no revocations were ever made.

Senator ROBINSON. Mr. Flynn has just stated that ex-Secretary Garfield, two days before he went out of office, revoked 25 of those permits.

Senator CLARK. Yes; I know that.

Mr. FLYNN. They are shown in the record of the House committee hearings.

Senator CLARK. And yet Mr. Fisher

Mr. FLYNN (interposing). There is Dr. Smith, who can answer that question.

Mr. SMITH. Those revocations are listed in the hearings.

Mr. FLYNN. Yes. The point I was making, Senator, was that nobody believed that the Secretary of the Interior would ever revoke any permits, even if he had the power to do so—but he did revoke them.

Senator ROBINSON. I think, in all fairness, that we can not assume——

Mr. FLYNN (interposing). There is no reflection intended on the Secretary of the Interior; that is not the point I desire to make. I am trying to get positive legislation. That is the thought I have in mind.

And now there is a great deal said here about the provision, "For a period not longer than 50 years," and the department officials all talk a great deal about a 50-year lease. I think the people who expect to go on and develope these properties and operate them would be better satisfied if 50 years were specified in the bill, instead of "not longer than 50 years"—or for a less period, if a man did not want a 50-year lease. But I think it should be at least 50 years.

Senator STERLING. Would you be satisfied if the bill should provide for a lease for 50 years; that is, for that definite term, with a provision that a lesser term could be granted at the option of the lessee?

Mr. FLYNN. Most assuredly.

I will now continue to go through the bill.

With reference to the provisions regarding the use of power for municipal purposes, and the minimum period for which the Secretary can issue prospecting permits for the man who wants to go out and prospect, I have nothing to say.

I think in section 2 of the bill you might make the provision more stringent. I believe there are people who are interested in the business who are just as anxious as the department is to have reasonable restrictions; I believe those companies should be made to toe the mark, and I think in section 2 you would have been justified in providing certain restrictions as to the amount of work that is to be done and when it is to be done.

And then we come to the provision as to 50 per cent of the output. As to that, I think that, even if you passed a law directing the Secretary to make leases, but leaving that 50 per cent provision in there, you would not get any development.

Now, let me say that we are in rather a peculiar situation: Secretaries of the Interior come and go, but water flows all the time, just as the Indian used to say that his treaties ran as long as grass grew and water ran. Now, Mr. Pinchot says that he does not think that a 50 per cent provision is material—and if there is anybody in this country that has led the public to believe that he understood the water-power proposition I think it has been Mr. Pinchot—if he says that he believes no harm could be done by striking out that 50 per cent provision, I say, by all means, strike it out. I do not think Mr. Fisher was very insistent upon that, but this bill insists upon it——

The CHAIRMAN (interposing). Let me say at this point that I do not think that Secretary Lane is insistent on that. I understand

that he has expressed himself to the effect that it would be quite agreeable to him to have the bill amended so as to make the term 50 years, or a less term, if the applicant desires a less term.

Mr. FLYNN. That is all right as far as it goes.

The CHAIRMAN. If we amend the bill and make it read that way and then vest the discretion in the Secretary, as the first section provides, whether he will issue a permit at all or not, of course if he refuses a permit there is no money invested, and consequently there is no money lost; but if there is a permit once granted by the Secretary of the Interior and it can not be revoked, except at the end of 50 years unless the grantee fails to comply with the prescribed conditions, when it could be done only by a court of competent jurisdiction. That would fit the case, would it not?

Mr. FLYNN. Yes; but as I understand the attitude of the Senators, the principal object of this bill is the protection of the consumer. Now, my contention is that by proper regulation you are always bound to protect the consumer, but I do not believe the Government should ever take over these properties unless in cases of public necessity.

Senator ROBINSON. Before you discuss that subject, let me ask you this question about the 50-year provision: What would you do in cases where the State water franchises are granted for only 40 years? I am informed that the State of Oregon grants water rights for only 40 years. Would you say, in a case of that kind, that the Secretary of the Interior must issue a permit to use these power sites for 50 years, notwithstanding the fact that the company applying for the use of the site had a franchise of only 40 years under the laws?

Mr. FLYNN. Is it interstate?

Senator ROBINSON. It does not make any difference whether it is interstate or not. It occurs to me that one reason for vesting a discretion in the Secretary as to the period of the lease would be the fact that in some of the States the franchises of the companies are limited by law of the State in which they are created to 40 years.

Mr. FLYNN. This is not a franchise.

Senator ROBINSON. I understand that.

The CHAIRMAN. That could be remedied by the applicant accepting the lease for only 40 years, agreeing to take it for only 40 years.

Senator ROBINSON. But suppose the applicant had a permit for 50 years from the Government; when he only wanted it for 40 years; should the Secretary of the Interior be compelled to make him take a lease for 50 years?

Mr. FLYNN. Well, I think this would be the effect: You regulate him in this matter; in his dealings with the State, let him take care of himself. That is why I say that it is immaterial what the new inventions are; the man who has his money in a plant and is operating the plant has to keep up with the times, or he is thrown in the junk pile; the Government can not keep him out. Personally I do not think the Government ought to go in the business, because the only reason advanced for governmental ownership is to protect the public——

Senator ROBINSON (interposing). I am not talking now about the Government taking over the property or anything of that sort.

Mr. FLYNN. I understand.

Senator ROBINSON. I am talking about whether the period of the lease should be fixed for 50 years, no more and no less; and it has occurred to me that as some of the States where these operations are to be developed and carried on have laws limiting a franchise to 40 years, perhaps it would be wise to leave some discretion in the Secretary of the Interior as to that point; otherwise the bill might create a complication by compelling the Secretary to grant a lease for a longer period than the State franchise.

The CHAIRMAN. If the applicant could only get a State franchise for 40 years, why should he apply to the Secretary for a lease of more than 40 years? He would not want to assume something that he could not carry out.

Senator ROBINSON. He might have to. And that is the reason I say the Secretay should not be compelled to issue a lease for 50 years that would be unworkable for that time.

Senator STERLING. But if an applicant for a 50-year lease under such circumstances was willing to take his chances in regard to the renewal of his franchise, which originally was 40 years only, would it not be proper for the Secretary to grant him a lease for 50 years?

Senator ROBINSON. Well, he might take the chances with a 50-year lease; but it would not be of great value to him to have a lease on the sites for a longer period than his franchise to use the water; that is what I mean.

Mr. FLYNN. I do not think I make a mistake when I say that any man building these properties would be willing to pay in cases 25 per cent more for his property if he was not compelled to come here to Washington to obtain any permit or any authorization—and that does not apply merely to this administration at all.

Senator ROBINSON. Well, it is probably true that he would be willing to pay 25 per cent more for immunity from going to the State capital also.

Mr. FLYNN. He has to go there.

Senator ROBINSON. Yes; and he may have to come to Washington.

Mr. FLYNN. He surely will if this bill passes as it is.

Senator ROBINSON. It looks that way to me.

Mr. FLYNN. Now, if you will take up section 3 of the bill I would like to discuss that. It says, "That in case of the development, generation, transmission, and use of power or energy under such a lease in a Territory, or in two or more States, the regulation and control of service and of charges for service to consumers and of the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior or committed to such body as may be provided by Federal statute."

So that I take it that, in all interstate business, that settles the proposition; that section 3, however, must be taken in connection with section 9, to find out where we are. The Secretary of the Interior, in his statement before the House committee, I think, has a different view of what that section means from the view I take.

Senator ROBINSON. That is of section 3?

Mr. FLYNN. Yes, section 3. On page 291 of the House committee hearings, the Secretary, in discussing the feeling in the West, and so on, says:

> Now, you think over in your mind the objections that have been raised to these bills. They say that "the Federal Government wants to erect itself into a bureau-

cracy and control the West; you want to make the rate; you want to have all the industries of the West coming here to Washington and asking some petty clerk what may be charged for power." We have obviated that, have we not? That is met in the bill by turning that matter over to the State that can take care of it.

I do not understand that language and Secretary Lane's statement as meaning the same. I am here merely to call the attention of the committee to some things; and that is all I have to say about that.

Now, the proviso of that section 3, beginning on line 19, says:

Provided, That the physical combination of plants or lines for the generation, distribution, and use of power or energy under this act or under leases given hereunder may be permitted, in the discretion of the Secretary of the Interior, but combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade with foreign nations or between two or more States or within any one States, or to fix, maintain, or increase prices for electrical energy or service, are hereby forbidden.

Suppose the State prohibited a physical combination, or have authorized one, which they are doing; they are not prohibiting them as much as they are authorizing them; and suppose the Secretary of the Interior did not authorize it?

Senator ROBINSON. That provision does not add anything to existing law; that is a recital of the part of the Sherman Act.

Mr. FLYNN. I think they have added a little to that act.

Senator ROBINSON. You do?

Mr. FLYNN. Yes, sir; they have added the words, "within any one State." They figured it, I take it, that they would give them plenty of restrictions.

Senator STERLING. Well, beyond that, is that provision objectionable, do you think—that restraint of these combinations?

Mr. FLYNN. Let me say this to you: I do not know what the views of this committee are. I was before the House committee in their hearings for several weeks, and when they asked me some questions with reference to that I said, "Gentlemen, I have my views; I have always believed in spelling 'Nation' with a capital N; I judge that this committee are in favor of spelling it with box-car letters." [Laughter.] "I have no desire to discuss State and Federal matters here with this committee; in other words, I think I know when I have got enough."

Now, we come to section 4 of the bill——

Senator STERLING (interposing). Excuse me, Mr. Flynn, but do you mean that you have had enough of discussion, or enough of Federal regulation under that clause? [Laughter.]

Mr. FLYNN. Senator Sterling, I have been a Federalist; I vote that way, but I do not care to discuss that with gentlemen who believe in it apparently a thousand times more than I do. I relegate that to the gentlemen who have ordinarily taken care of the States rights.

In other words, the Secretary of the Interior is given the control of physical combination of properties, either between different States or within one State. That would give him—let me diverge here for a moment—I believe that the effect of this kind of legislation will lead to more trouble than benefit; they can tell you all they like about getting along with State commissions; that is just like the charges made here to-day and during these hearings, that the water-power people wanted so much and that they would not give in. In fact, it is a case where, whatever the defects of this legislation may be, the proponents of it want legislation; they want harmony if

they have to fight for harmony, and they say that if you do not agree with their views you are helping the water-power trust, or something else of the kind.

The bureaus try to carry out honestly what they believe should be done in the public interest. I think there is a tendency all along the line of centralization in this Government; not only in this Government, but in cities and counties and States, and everything of that kind. And here is where it all leads to, in the States, cities, townships, and counties—to unlimited bond issues; and the consumer is the man who is paying the interest on the bonds. Now, with reference to the written consent of the Secretary of the Interior, section 4 provides that except with such consent "no sale or delivery of power shall be made to a distributing company"—

It was suggested here that it would be better to compel the developing company to distribute power, so that there would not be a middle man. I take it that that was the reason for that.

Well, in most of the States. or a good many of the States, before you can operate or distribute electricity in a city, you have to have a franchise; you have to have a franchise in my State from the voters of the city. And this is what occurs: this is the practical side of it: Before they vote on a franchise they provide certain restrictions in the franchise.

For instance, you may have to light the city hall; or you may have to light the fire department; or you may have to furnish the city with certain street lights; or have to furnish other free service of that kind. Those provisions are in the local franchise.

Now suppose the Government takes it over; suppose it is interstate and it is followed by the distribution of power, is the Government going to give me franchise in my town if I have an interstate pole line? If not, then the only market for me is for me to sell my power to the man who is distributing under a local franchise; and the sale to him is prohibited, except with the consent of the Secretary of the Interior.

The effect of that would be that, if a pole line two or three hundred miles long was blown down by the elements and it took 60 days to repair it, there is nobody on earth who could furnish that company with power, except with the consent of the Secretary of the Interior, because it would be required for over 30 days.

Now, we come to the question of the United States taking over the property. I merely want to call your attention to the fact that, in his testimony before the House committee, ex-Secretary Fisher said that he believed that these properties should be taken over at a fair value. That is the view of the former Secretary of the Interior; the present Secretary of the Interior says, "No; certain parts must be taken over at cost."

I do not know what the method of getting legislation through Congress is now, but in my day this is what they did: When you passed a bill and it went through both Houses of Congress, and it went to the President, the President referred it back to the Cabinet officer whose department was affected by it; and my sad experience has been that I have had several of those bills returned, and the head of the department would advise the President that he did not think the bill should be approved; I never was able to get the President to sign them unless I got the Cabinet officer who had jurisdic-

tion of the subject matter to tell the President that it met with his approval; if he said that it did not meet with his approval, the President vetoed the bill.

Now, what fix are we in here? Secretary Lane, in his testimony before the House committee, said this about "the actual" and the "fair value;" this is on page 301, about the middle of the page:

Secretary LANE. And I think I have explained myself fully as to why I think that the words "actual cost" are vital. I would not give my approval to a measure which struck out the words "actual cost" and substituted the words "fair value" in that connection.

So that, I take it, is a notification in advance that if Congress passes a bill providing for "fair value" and not "actual cost," as referred to by the Secretary, the bill will be vetoed.

Now, what does he refer to as "actual cost"? In his testimony, on page 292, toward the end of the page, Secretary Lane says:

Secretary LANE. Of course, they pay nothing for the Government land, so that we would get back as part of our own, and the private land we want to pay them just what they paid for it.

In other words, this paragraph strikes me like that old proposition, "Heads, I win, and tails, you lose." The only property that can increase in value at all is the land that you buy. I agree with you that no valuation and no price should be paid for anything that the Government gives. But suppose the Government only has 20 acres and I have 10,000 other acres; at the end of 50 years that 10,000 acres is worth, presumably, a great many times more than what I paid for it. Why should not I receive the fair value for it? What do I lose on it? This bill provides that for the physical value I shall receive "fair value." In other words, let us take it now from the financial standpoint: Suppose you issue under this lease $100,000 of bonds; I buy one of them; the bonds run 50 years; it looks good to me; you assure me that I will get the interest and everything of that kind. A man who buys the bond is not satisfied with the interest; he wants to know that he is going to get his principal back; and, in my judgment with the provision that you have in this bill, taking over the only property that will enhance in value at cost, and the only property that can depreciate in value at a "fair value" at the time, that would result in leaving the man who owns the $1,000 bond with probably only $600 worth of property to fall back on.

I think that is worth your deep consideration. The man who buys a bond is not figuring only on the interest; he wants all the interest he can get, of course; but over and above that he wants to know that he will get back his principal.

The CHAIRMAN. I do not know that I understand that; if the property is taken over, and the property is paid for, does not the bondholder get the full amount of his bond?

Mr. FLYNN. Suppose you pay $500,000 to-day for real estate which you use. You use it for 50 years, at the end of 50 years the Government will give you $500,000 for it, because that is what you paid for it.

Now, then, you have got $5,000,000 invested in physical properties of one kind or another on that land, which physical depreciate in value. Now, will you get cost for all of that? No; if it all pro-

vided for cost, the man would be whole; but you provide that that shall be appraised, and you would get the fair value of it only; and the physical property might be a junk pile at that time. Do you catch my point?

Senator STERLING. Do you understand that "fair value" is the term used in the bill, or "reasonable value?"

Mr. FLYNN. Senator Sterling, that does not make any difference.

Senator STERLING. Well, granting that it does not make any difference; your interpretation would mean this, would it not; taking the buildings, for illustration—that if a building had cost, say, $10,000, and had stood there 20 or 25 years, or 50 years, and had depreciated in value, so that the building, as such, standing alone, would not be worth half its original cost, do you understand that you can not take into consideration now, in fixing the reasonable value, the situation of that building, where it is located, and the uses to which it will be put in the future in carrying on that work; would not "reasonable value" include that element?

Mr. FLYNN. Yes; but, Senator, I am rather disposed to think that it would be held that it was part of the real estate.

Senator ROBINSON. Well, with regard to the depreciation of those properties that you refer to, that is always taken care of in the earnings; that is always considered by every commission that I am acquainted with; the company gets an income or other return based partly upon that.

Mr. FLYNN. Yes; but they take the physical property; the earnings go into that if you try to keep up your property as you run along; but suppose it gets along toward the end of the time of the lease and you do not know whether you are going to get your lease renewed or not—I am going to take up that proposition in the next paragraph. You will get the "fair value" of that property. I called the attention of the House committee to that; I did not think that was the intention, but as it passed the House in that way, and in view of what I have heard in this committee, I think that was "with malice aforethought." If a man must lose the depreciation on an estimate of the "fair value," he ought to get the increase on all the property that he bought and that he owns—not the Government's property; I say, do not pay him a cent for that. Take out what you gave him; that is all right. But what right have you to get his other property without paying him for it what it is worth?

Mention was made here the other day about a man who had $50,000,000 or $60,000,000 invested in plants, and all the Government land that he had was 28 acres; and because of that 28 acres he must agree, under this provision, that all the balance of his property enumerated here in the bill should be taken over at cost, and the balance of it at fair valuation.

The CHAIRMAN. A case of that kind is what I had in mind when I asked some of the witnesses what they thought about inserting the clause about "not less than 5 per cent of Government lands."

Mr. FLYNN. Yes, Mr. Chairman, I am with you on that as far as I am concerned.

You have heard all the argument made here as to the intangible element of value: that they should not be paid for any intangible element of value. The critics—not all of whom are in office by any

means—of the water-power legislation suggested by practical men who are operating water power plants, are living upon intangible values that they inherited; they are not like those of us who work on these projects. Of course, I hope that some day or other my boys will get some benefit from intangible values that I have been able to build up for them; but I take it that it would come with very poor grace from me to say, who never had had a chance, that I started on nothing and worked on grubstake, and say to those people, "You are not entitled to any increase on your property, because your father died and left you a million dollars or two"——

Senator STERLING (interposing). Just one word, there, if you will excuse me. It seems to me that you made a somewhat exaggerated comparison or illustration awhile ago when you spoke of the Government land for which the permit will be granted being about 5 acres, and there being 10,000 or more acres of privately owned lands which the lessee would have to purchase.

Now, could you imagine any instance wherein the lessee would have to purchase that much land? Would it not be in only a very few cases in any event, if there was a Government site there, where the man would have to purchase so much private land?

Mr. FLYNN. You make this mistake: There are many water-power developments where the dam site, for instance, is on Government land; but there are hundreds where it is not. I know of one case; I do not care to mention it; but I will tell you that I would have done just what Mr. Ryan did with Mr. Fisher, if he was Secretary of the Interior. If I had another lease pending and had to have action on it and I got one, I would swear that it was the best thing on earth, at least until I got it financed and got "out from under." You must understand this, also, if you will pardon me, Senator, for saying it, that men come before this committee who have matters pending and they do not want to disturb the equilibrium that is going on in bureaus.

Section 6 begins as follows:

That in the event the United States does not exercise its rights to take over, maintain, and operate the properties as provided in section five hereof, or does not renew the lease.

I think you should provide there that, in the event the United States does not take it over, the preference right shall be given to the lessee, if the Government does not exercise the right, of course.

I can not get away from this proposition, that the Government's idea in reserving the right to purchase is for the public good; that is the only reason there could be for that provision. Now, with all the regulation that you have, the Government should not ever consider taking it over except for public necessity. That is my view of that.

The CHAIRMAN. I agree with you; if the Government does not take it over, the original lessee ought to have the preference in the renewal of the lease.

Senator ROBINSON. I agree with that.

Mr. FLYNN. That is the only reason I can see. I thought that was the unanimous view in the House committee, but I find it was not.

Section 8 provides for the Government tax. This says: "That for the occupancy and use of lands and other property of the United States," and so on.

What other property has the United States, I would like to know in this connection? If that is a "joker," let us know what it is; what other property? The whole argument on the part of the Government, and the power men here, has been that it was land which was valuable because of possible availability for water-power purposes.

Now, what other property has the United States beside the land? That is merely suggested for the consideration of the committee, as to whether the United States has other property; if they have I would like to know it. But I would like to make one suggestion, and that is on the question of charge. I do not think the Government should charge anything.

The CHAIRMAN. You do not think the Government should charge anything for its lands?

Mr. FLYNN. Why, if it would sell its lands that would be different. If it is a right of way across it for any purpose, all right. But the State taxes it; they may not tax so much a horsepower as some States do now, but there is the ad valorem tax; they are stuck for taxes, no matter what they are.

Now, what does the Government give in return? On an investment of $50,000,000 suppose the lessees have, say, 40 acres of Government land. How much is their tax? How much does the Government receive? The object of the Government is said to protect the consumer and to retain control. You have the control, and you protect the consumer; if you are going to have a tax—that is what I want to urge—if you are going to have a tax or charge, gentlemen, have it definite. Let Congress fix a maximum charge, and then let the man who makes the property be just like the miner who goes out to the hills with his burro, who knows that if he finds pay dirt what he can do; let the water-power men have the same thing; fix your tax if you must, and then let the men tell you, if you fix a positive tax, whether they can stand that. Leave it optional with the Secretary, and do not fix a minimum; and if he does not think this property can stand the tax, do not put it on him; the men who are financing the scheme would like to know how much it is in advance.

I know a man who was before this committee who has $500,000 in prospects that he is going to invest in; he has an interest in 130,000 acres of land—and I am interested with him—provided he can get legislation.

Now, these things are not financed in 24 hours. The Secretary of the Interior is going to have control of the bonds; and do you know that is going to cause trouble? The banker is the meanest man on earth to deal with at times. The Secretary will undoubtedly devise the form, and the banker may object to the form which the Secretary recommends, and then the banker will prescribe a form, and the Secretary will not take it—and all the fat will be in the fire. I am talking about things that I have been up against. I have been in the financial districts of big cities almost begging for money because I was "all in" and I had to "make a raise" or I would go broke.

Now, I would like to call your attention, on page 7, to the proviso beginning on line 13, reading as follows:

Provided, That leases for the development of power by municipal corporations solely for municipal use shall be issued without rental charge.

I take it that that on its face would strike the average man as meaning if the city wanted to develop water power for city lighting or pumping that the power should be free. But I think that language should be more specific, defining what is meant by "municipal purposes."

I have a case in point. I am interested in a company that is furnishing electricity by steam. The opinion prevailed among a great many people, without any dissatisfaction against our company, that municipal ownership was the thing to have. They proceeded and built a dam and a little power plant. They not only furnished the city, but they took in the cream of the business district.

And what is the consequence? We lost, $30,000 in operating our plant, and the city lost in operating theirs; but unfortunately they do not keep their books as we do; whenever they have not money enough, why it is put in the general tax, so that when the city lost $50,000 the books would not show anything. The money that they receive is thrown into the treasury and all the money they need to operate is raised by way of taxation.

I do not think that cities ought to be encouraged to vote bonds, unless it is for municipal public use; I do not believe that Congress ought to authorize a city to take these rights free as against an individual, and, by public taxation, make up a deficit, because they desire to go into a general lighting and power business.

In section 11 the Secretary of the Interior is authorized to examine the books and overlook the accounts and everything of that kind. I think you should provide that in States where there is a public-service commission—and there certainly are enough of them—and reports are made to that commission, the forms as used by the State commission and the reports made under oath to the State commission should be accepted by the Secretary of the Interior. The State commission establishes special agents who go around and investigate these businesses; that is enough. No man should be delegated from Washington to go out there and perhaps instruct you or me to open an entirely different set of books for the Government's business from those necessary in the State's business; a man should not have to make an entirely different set of reports to the Government from those he makes to the State on the operation of the same property.

So that I think if you leave that in you should provide there that where the State commissions require those reports the same form should be used by the Secretary of the Interior. If you do not, then some of the people who claim they are interested for the sake of the consumer are not carrying out in good faith their views, because a great deal of the expense of public-service corporations is caused by clerical details that are imposed upon them by commissions of one kind or another; and one commission ought to be enough.

Section 13, in my judgment, should take the place of any other section with reference to the bureau's authority.

Senator STERLING. Just what do you mean by that? I do not understand.

Mr. FLYNN (reading):

That the Secretary of the Interior is hereby authorized to perform any and all acts and to make such rules and regulations as may be necessary and proper for the purpose of carrying the provisions of this act into full force and effect

I think that is all the authority he ought to have; I think that is ample.

Whether we like it or not, men disagree; the bureaus disagree among themselves. You heard Mr. Pinchot yesterday; he thinks this bill is faulty if you do not turn it over to the Forestry Bureau. And to-day we heard ex-Secretary Fisher, who said that he thought the bill ought to provide for taking over at "fair value," and you heard Secretary Lane, who says it should be "at cost." Now, if those people can not agree among themselves, do you wonder that the people who are interested in either development or financing are a little bit shy about coming here to Washington?

Now, Mr. Chairman, unless some of the members of the committee have questions to ask, I want to thank you for listening to me. I will say, in conclusion, that I hope this bill will pass in some kind of workable shape.

The CHAIRMAN. I hope it will pass in some kind of shape; and I thank you for your remarks.

(Thereupon, at 4 o'clock p. m., the committee adjourned until Monday, December 21, 1914, at 10 o'clock a. m.).

WATER-POWER BILL.

MONDAY, DECEMBER 21, 1914.

UNITED STATES SENATE,
COMMITTEE ON PUBLIC LANDS,
Washington, D. C.

The committee met at 10 o'clock a. m.

Present: Senators Myers (chairman), Robinson, Ransdell, Hughes, Smoot, Clark, Works, Norris, and Sterling.

The CHAIRMAN. Well, gentlemen, I believe we might as well begin. You wish to begin this morning, Judge Short?

Mr. SHORT. Yes.

The CHAIRMAN. All right; you may proceed.

STATEMENT OF MR. FRANK H. SHORT, OF FRESNO, CAL.

Mr. SHORT. Mr. Chairman, my name is Frank H. Short; I reside at Fresno, Cal. I am appearing for the San Joaquin Light & Power Corporation, and of counsel for the Pacific Gas & Electric Co.; also of counsel for the Pacific Light & Power Corporation; and I have represented the interests of companies that have desired to develop the hydroelectric and water resources on the public lands for about 10 years, or ever since the controversy concerning the Government rights of way began.

In approaching the discussion of this subject——

Senator WORKS (interposing). Before you leave that, Judge Short, do you not also represent some irrigation companies? I know you used to.

Mr. SHORT. Yes. The fact is I do not know that they are very extensively interested. I think they have a reservoir site of great importance, partially on the public land. I represent in fact either directly or of counsel most of the irrigation companies in the central portion of California, and have been the chief counsel for the Fresno Canal & Irrigation Co., also the Consolidated Co., the San Joaquin & Kings River Irrigation Co., as counsel, and have for a great many years. And I have frequently had occasion to come in and advise in the organization of irrigation companies in the acquisition of their water rights and in organization matters. And I desire to say at the outset that, having given this subject so long and extended study, I feel perhaps that in presenting the matter I will present certain lines that will not be as thoroughly touched on by others; and especially in those connections I will appreciate very much the very careful consideration of the committee.

The reason for that is this, that it is desirable for the interests that I represent, and desirable for the West and desirable to the whole

country, that this matter shall be settled right, because it is that sort of a question that never is going to be settled until it is settled right.

The underlying fundamental difference between us is governmental and not corporate or financial, and in my humble opinion we must get the governmental agencies of control and development along right lines; otherwise, no matter how fair and favorable this legislation might appear to be upon its face to those who desire to develop on the public lands, it never will be permanent or satisfactory. Nothing that is fundamentally incorrect and that is therefore shifting and variable is every satisfactory either to the citizens or to the industries or the corporations or investors who are developing these industries.

Mr. Fisher remarked day before yesterday that if this matter was not settled along lines that he very earnestly believes in, the agitation will continue. It is just as well to understand that if it is not settled along lines where it belongs, where it rightfully rests, and where it will be properly handled, the agitation will, as he says, continue. It does not require anybody to keep up an agitation of a matter that is not being conducted with due regard to the orderly process of government, and therefore with due regard to the interests of the people.

I am a strict believer in the idea that permanently and substantially the interests of the people are never well served except they are served by those who have been chosen and delegated and empowered under the Constitution and the law to direct and control their affairs. Any other arrangement is transient; it is a usurpation, and, in time, it is bound to develop a conflict. There is no escape from that sort of thing. We can have, in the beginning, this "after you my dear Gaston" business between State officers and the Federal officers and the power companies, and all that sort of thing; but you will discover in the end that human nature is human nature, and that the person authorized to exercise all the power will ultimately exercise that power.

It is suggested that the industry represented at this hearing ought to be satisfied with certain sorts of administration. Some have said they ought to be satisfied with State regulation and some have said they ought to be satisfied with Federal regulation, and some have said they ought to be satisfied with Federal regulation of interstate commerce.

Let me lay down a rule that nobody can get away from, and that is that we all ought to be satisfied and must be satisfied if we are regulated and controlled and directed by those who are empowered under the law and by the will of the people to impose that regulation upon us; but nobody is going to be satisfied, nobody is going to rest, no industry is going to prosper when that power or that control is exercised by some one not empowered under the law to do so. It does not make any difference whether we like State regulation or not, the question is whether that authority which does regulate has power under the Constitution to so regulate. It does not matter whether we like interstate regulation or not; the question is whether that is the authority empowered to regulate. It does not make any difference whether we want the State to do it all or most of it or whether we want the Federal Government to do it all or most of it. One of the witnesses said that it would be agreeable to

the corporations developing these power sites to have the business regulated by an interstate commission as interstate commerce.

Now, I submit to you, gentlemen, the question as to what difference it makes whether we want to be regulated by one or another. It is a question that is absolutely final which authority is authorized and empowered to regulate, and when that is settled the regulation will come in that way. If 8 or 10 years ago we had gotten down to bedrock and had determined in a fair and intelligent way where these powers do rest, who under the Constitution and laws of the United States ought to exercise them, we would now have been, I believe, in a satisfactory situation. I believe if that had been done the corporations would now be properly regulated and development would now be going on and I know that the interests of the people in the development of their resources and the control of their rights would have been infinitely further advanced than it is to-day in the face of this conflict.

We hear a good deal about the twilight zone. That is a very happy phrase. I happened to be present and heard it the first time that phrase was ever spoken. However, I made up my mind, after a good deal of study of the matter, that there is no necessity of a twilight zone at all—none at all. The twilight zone rests in interest or desire or stubbornness or ignorance—one or the other, and sometimes all of them. The zone of the powers of the Nation and of the several States is perfectly easy of ascertainment if capable, unbiased men will sit down with honest and open minds to determine where it begins and where it ends. I think that the recent decision of the Supreme Court of the United States in the Minnesota Rate case and in some other connected cases has gone a long way to clear the atmosphere and make plain what always was or ought to have been plain; that is to say, that in the matter of the powers of the Federal Government, where they are derived under the Constitution, the States may regulate their internal resources in any way they please until that regulation comes in conflict with the necessary powers of the Government of the United States representing and acting for all of the States in interstate matters. But whenever that conflict comes in, to the extent of adjusting that conflict and regulating the matter accordingly the powers of the United States are supreme and unquestionably ought to be. Those things usually settle themselves if we do not want the thing one way or the other and different from what it is or ought to be.

Upon this hearing there is one thing at least that has been fairly agreed upon; that is to say, not only ought the hydroelectric powers of the country to be developed, but there is a fundamental reason why they should be developed as a preferential development. That is to say, that whether we have coal enough to last, as Mr. Pinchot thought a few years ago, for 75 or 80 years, or for three or four thousand years, as some other people think, there is no necessity for burning the coal or oil if you have available an equivalent source of energy for the carrying on of industry and supplying the needs of the people that, when it is used, is not consumed and nothing is lost, nothing is taken away. Therefore it is fundamentally true, and all may agree to that, that wherever it can be done these extraordinary hydroelectric powers should be developed, and those resources should be applied in carrying on the industries of the people to the end that

nothing shall be unnecessarily consumed or destroyed. It would seem to be equally clear that if these industries are to be developed, if hydroelectric power is to take the place of coal and oil and other sources of energy, these hydroelectric powers must be put upon a basis for their development which is as good as or better than any other, which means that all such industries must be subject to the same control, no greater and no less than all other industries engaged in the same line of business in this country. We could not, I think, except them if we would, and we ought not if we could.

I submit that, however eleemosynary the purposes of officials may be, if an industry is regulated by two sets of officers, each claiming all of the authority, or most of it, and if it is taxed from two different directions, and if the question as to whether it can go in one direction or another, or whether it can do one thing or another, is assumed to be determined by two authorities, that industry is not upon an equality with an industry that may go to one authority and may have all those questions determined; may pay its taxes, may pay its charges equally with all industries similarly engaged. It does not make any difference whether it is a Federal charge or a Federal tax, or a State charge or a State tax, or whether it is both, so long as both are lawful, so long as all of the other industries engaged in the same line of development are subjected to the same control, the same regulation, and the same charges from the same sources. But whenever you single out one set of those industries and, by reason of any peculiarity of the situation, you endeavor to impose upon them a regulation that you do not impose and can not impose upon another industry, and whenever you undertake to impose a charge upon the products of that industry that you do not impose upon the products of another industry—that you can not impose upon the products of another industry—that industry is not aided, that industry is not built up, that industry is not going to be developed, but it is going to be retarded and held back, and there is only one answer to any such problem. Therefore it is my purpose in this hearing to try to point out that hydroelectric development—the development and use or the development and distribution and sale of generated hydroelectric power—should be controlled by the same laws in every respect, whether they are laws controlling municipally or otherwise. They should be subjected to the same charges and taxes as all other industries similarly engaged, whether within the State or within the Nation, but to no other.

I am now inclined, in the preliminary suggestion that I make, to challenge the gentlemen on the other side, whose ability and sincerity I greatly respect, to point out any reason why it is that the laws of the United States and of the several States that operate equally upon all of the industries engaged in identically the same business with the hydroelectric powers upon the public lands should not be controlled by the same laws, subject to the same charges and regulations and taxes, because we know that, except for their incidental location upon the public lands, they are identically situated.

But that is a separate subject, and I will approach it separately.

Now, gentlemen, I wish to divide what I have to say under two subdivisions. The first one will be a consideration of the bill as to its workability and in a degree as to its legality, and some suggestion as to what I think ought to underlie and direct and control the

situation, and separately a consideration and presentation of the proposition as to the right of the Federal Government to make any exceptional laws, as to the right of the Government to make any exceptional charges upon industry or to make any exceptional regulation of industry, because incidentally these industries happen to be situated upon land that incidentally happens to belong to the Government of the United States.

Of course in the presentation of the bill I shall have to tread a little on the latter subject, but I will do so no more than is necessary to explain my views. I also desire to say that in presenting my views of this bill and my views of the law and my views as to the position of certain persons prominent in this country I do so with absolute personal respect. However strong—and they are pretty strong, I am frank to admit—my views may be in antagonism to the views held by those gentlemen who I feel are invading matters over which they have no right or authority, nevertheless I concede that, although deluded from my point of view, they desire to do right—they desire to help the people. But my idea is that the American people choose for that purpose those people that are to help them, and the people do not in this country choose themselves and elect themselves to help the people, and when they undertake to do it it is my humble judgment that they hurt the people and hurt themselves, and however enlightened they may be I do not think they get anywhere, and they have been doing it now for 10 years and have not gotten anywhere yet, not because they are not able—not because many of the things that they wish to do ought not to be done, but for the very simple reason that this Government comes from the people, and anybody who seeks to act upon an authority that is not derived directly from them through the Constitution of either the Federal Government or the States, which alone is the expression of the will of the people, acts without authority, ineffectively, improperly, and hurtfully.

Now, I shall undertake, if I can, to demonstrate those things before I conclude.

I shall first consider section 1 of this bill. There has been a good deal of conflict and discussion here as to whether this bill should be made rigid or elastic. By that it is meant whether in the expression of the will of Congress there shall be a definite setting out of the things that are to be done, of the rights which shall follow, or of the duration, for instance, of the tenure, the amount of the tax, and, in other words, if we are going to frame a bill here of such a nature that the department having jurisdiction must carry that into effect by its rules and regulations or whether this shall amount to a delegation of authority to the department to permit or not, to lease or not, to allow these things to be done or not to be done upon such terms and such conditions as the department may appoint.

This is the most perfect delegation of power that I have ever seen. In that respect it is absolute. It is not only absolute directly but incidentally and in many other respects where the power is left in the Secretary to suspend the law. We hear a good deal of talk on the subject of whether the Executive authority of the Government can suspend the laws of Congress or not. But it follows if Congress suspends its own law and turns it over to the Executive the question could never arise, and it would never arise under this bill, because

nothing is done by this bill except to authorize the Executive to carry out or not to carry out its purpose, according to his own discretion. That is undeniably true in a half dozen respects, or at least four or five. The provision here is that the Secretary may lease for a term of not exceeding 50 years. Well, you will observe at once that in the first place he is not required or directed to lease at all, and while we might assume that he would construe the word "may" as meaning that he should, but not that he must, there is no provision upon the part of Congress—and I want to emphasize this point—conferring any right upon any State or any municipality of any State, or of any citizen of any State, or of any authorized corporation of any State, to make any use or appropriation of waters or distribution of power upon the public lands at all.

It can not be found in the bill anywhere that any one except one man in the United States is authorized to permit or to refuse. That is all there is about it. If that could be disputed, and if a technical argument could be indulged in as to whether "may" means "must" or not, when we got through with that argument it would not make any difference, because in the next sentence it is stated that the Secretary may make these leases for not more than 50 years, which would include 15 minutes. Consequently, as to the whole body of the States in the public-land States, and as to all of their authorized agencies, any Secretary of the Interior not in sympathy with this act could refuse absolutely to make any leases that could be developed or operated at all.

The CHAIRMAN. Judge Short, permit me at this juncture to say that I understand that Secretary Lane and, I believe, most of the members of the committee I have heard speak of it, are in hearty accord with Senator Works's suggestion, that some provision be inserted in this bill that the lease shall be for 50 years or less, if the applicant desires, so that if the applicant does not desire a lease for less than 50 years it must be for 50 years if at all. I think that amendment meets with the approval of the majority of the committee.

Mr. SHORT. So far as I have heard any expression of opinion upon the part of members of the committee, I recognize that such a provision does meet with the approval of the committee, but I feel the necessity of dwelling, as briefly as I may, upon the points that seem to be conceded so far.

Senator ROBINSON. May I ask you one question in that connection, Judge Short?

Mr. SHORT. Certainly.

Senator ROBINSON. I had not intended to interrupt you, but it seems to me expedient to ask this question now.

Mr. SHORT. Yes, sir.

Senator ROBINSON. Would it make any difference, in your opinion, as to what the length of the lease should be as affecting the public interest if the period of the franchise varied and was less than 50 years? In other words, would it enable a person who had this lease from the Federal Government of the dam site to compel the States to renew his franchise upon favorable terms if his franchise expired, say, at the end of 20 years, considering the fact that no one else could get it?

Mr. SHORT. I was going to come to that suggestion shortly.

Senator ROBINSON. All right; then I will not interrupt you.

Mr. SHORT. I will just say here, before I pass it, that in my opinion, and I have so advised my power-developing friends, they can not afford to ask for anything that they ought not to have. And the power that has a right to determine how long this thing shall continue and whether it shall be transferred to somebody else is undoubtedly in the State. I do not think anybody will question that. And it would be a mistake for the Federal Government to grant these rights at all except coordinately with the right and duty to use the water under the State law. What sense is there—what right has a corporation holding a lease of a right of way in one hand and a water right in another to say to the people, "Now, you catch which ever one you can"?

Senator ROBINSON. That is the way it occurred to me.

Mr. SHORT. I undertake to say that by invading the functions of municipal government the Federal Government will do infinitely more harm than it will do good.

I will just proceed with the suggestion so that you will understand my ideas, that these rights of way ought to be granted coordinately with the right and duty—and it is a duty, you understand, that may be compelled by mandamus—to provide and carry on these water developments and the service thereunder for the public use under the laws of the State, and I think any other provision or arrangement is a mistake.

Senator WORKS. Suppose this grant was made to the corporation during the continuance of its franchise, so that the two would be harmonious at least in that respect?

Mr. SHORT. I think that is the idea, except that I would express it that it should not only be granted to but should continue with whoever was charged with the right and duty to appropriate and distribute the water and electric power under the State law.

Senator WORKS. Well, either the franchise or its extension by the State?

Mr. SHORT. Yes; that is the idea exactly.

And I do not think a power company or an irrigation company would have anything very valuable, but they would have something very hurtful in having a lease that ran longer than their right to the water under the State law. I will not go on to that subject now, but——

Senator WORKS (interposing). In that connection, Judge Short, the corporation would have no reasonable ground for insisting upon the holding of this lease beyond the time when it is able under its franchise to put the power or water to a beneficial use, at all events, would it?

Mr. SHORT. No.

Senator ROBINSON. Why should the Secretary of the Interior then be compelled to bind the Government under conditions of that kind? That is the very point I make. Why should the Secretary of the Interior, representing the Government, be compelled to do a thing that is useless and foolish and unreasonable?

Senator WORKS. I do not think he should be.

Senator ROBINSON. That is the reason for vesting discretion in the Secretary of the Interior, in my judgment.

Mr. SHORT. The idea I have is that this law should not undertake, either in itself or through the Secretary, to define the length of the term during which the incidental thing, the right of way, shall be used, excepting to define and provide that it should go to, run with, and adhere in whoever had the right to use the water, which is a right that comes from the State; and what is the use of saying anything else? It comes under State control and must stay there. It ought not to be granted for a shorter or longer term, and ought not to be granted for any term at all except the term that it runs with and is coordinate with the right to use the water, because, as I stated, you understand these rights of way will be situated on the lands of many other persons. The United States is sometimes the biggest landowner, but sometimes it is the littlest one, so far as that is concerned, where these rights of way are required.

Now, just imagine, if you can, some citizen of some State or any corporation of a State dictating to a public-service corporation that it could have a lease of a piece of land for a right of way for an essential and continuous service, under a certain State law, for a short term of years or for a brief length of time. Where would that person or that institution land that tried to dictate to the public and to the State how long an absolutely indispensible service should continue?

Now, recurring to the subject that I had under discussion. The law in its present form—and I am assuming now that it will be amended ultimately—what would it signify if it did provide that he should lease it for 50 years if you left with the Secretary the power to determine the rent in the lease. Now, this matter has been up before. I was present some six years ago, I guess it was—five or six—at a meeting in Secretary Garfield's office when Mr. Pinchot and others were present. Mr. Pinchot was then the forester and Mr. Garfield was Secretary of the Interior. We progressed in an endeavor to prepare some workable legislation to submit to Congress, to the point as to whether or not the Congress should say what the charge for the use of these lands should be, and Mr. Garfield and Mr. Pinchot adhered to the idea that the power should be in the Secretary to fix the charge. There were two or three Senators present, but the only ones I can remember just now are Senator Flint, of California, and Senator Nixon, of Nevada. There were some others called in, however, and it was pointed out there that this charge was not upon the lands of the United State; that it had no relation to the value of the lands and no connection with the right of way.

You noticed Mr. Fisher on Saturday, when the Chairman suggested that when perhaps not 5 per cent of a company's property was on the public land it ought not to be brought under the drastic operations of this law at all, said, "No; it is a question of control." Well, if it is a question of control, and the exaction of the charge is, as he said, a technical basis for control, the question is, is the Congress of the United States going to continue to be the taxing power in this country, or is it going to delegate it to somebody else?

At that meeting we got to the point of considering whether this charge upon an industry, an excise tax upon the development of electric power, wherever the development touched the public lands,

should be fixed by the Congress or by an executive officer, and the Senators came back over and conferred with a good many Senators at that time, and came back with the statement that they found nobody that said that the Congress of the United States would delegate to an executive officer the right to fix an excise tax upon an industry, and to fix it just as he pleased, without any regard to uniformity.

You understand that it does not make any difference to an industry whether you charge a fee upon the kilowatts generated or upon the returns from the kilowatts sold, it is identically the same thing; it is measured by the thing that measures the return. So that this is identical with the corporation income tax, and we are in fact now confronted with the proposition that the Congress of the United States, under the Constitution, is compelled to make excise taxes uniform throughout the United States. But it is now proposed that it shall not only not do so, but it shall delegate to one of the departments of this Government the right to make that excise tax just as high or just as low as he pleases. Whether we agree or disagree with that theory, that is what this bill proposes to do, nobody can question that.

Therefore every hydroelectric industry in the United States, if this bill is enacted in the form it is now, when it goes to the department to get a lease, is then informed not that we have a right of way that is worth so much a year or so much in its entirety, but is informed that "If you develop over 40 acres of Government land 100,000 kilowatts of electricity you must pay an excise tax of so much on that electricity," and if it amounts to anything at all it would amount to one hundred times a year what the 40 acres was worth to anybody under the heavens.

Now, that is a very grave question, a very grave question of constitutional law, allow me to remark in passing, as to whether the Congress itself could do that or not. But it is not a very grave question of constitutional law as to whether the Congress of the United States could delegate the power to an executive officer to say that "if you run a mill and that mill grinds out electricity that runs a thousand mills, that pumps an indefinite quantity of water, that lights and heats cities and runs trains, that he can stand at the mill and levy whatever toll he wants to levy." That is what this bill says.

I have no doubt that the Congress of the United States could not say that any one industry in the United States must pay an excise tax upon its production unless it should make it apply to every similarly situated industry in the United States. If I had any doubt about that, I could have no doubt about the proposition that it could not delegate to an executive officer of this Government the power to go to every different power house upon the public lands of the United States and say, "You shall pay so much excise tax on the electricity you turn out; you shall pay so much more; you shall pay so much less; you shall pay nothing at all." It is incompetent and impossible.

Further than this, instead of leaving it to the States that under the law have the right to say whether an industry shall be developed or not, to say whether it shall go on or not, or how much it shall do, or how little, the Secretary has lodged in him by this bill the power

to say whether in his opinion the development will produce the greatest quantity of electric power and with the greatest benefit to the public.

Now, you understand that this is an absolute discretion. That is not founded upon any fact, but upon judgment. And there, again, the Secretary of the Interior would have the undenied right to say, "This plan that you apply for, in my judgment, would not produce the greatest benefits, or this hydroelectric power would not benefit the people as much as some other power project or use of the water." We are not talking about what necessarily would happen, but what might happen. The man would say, "But I have already acquired a water right under the laws of the State, and it is my duty to develop it." He might say further, in some of the States, "I have had this passed on by the State, and it has approved it." But the Secretary, if he were an honest man, would say, "But the laws of the United States put in my mind and put up to me the duty of determining the question of whether it is or not, and I do not think so, and therefore I can not grant it." That, of course, can be manipulated, and that can be worked out, and in most cases it probably would be worked out, and in some cases it probably would not; but it is a power that should not be conferred. Of course, it is not so bad as the unrestrained power to give or refuse, or to tax or not to, tax. Nevertheless it is a power that belongs to the State and should remain in the State.

Therefore, in concluding upon section 1, allow me to suggest that I do not criticize in one direction the very learned and able gentlemen who have worked so diligently in the preparation of a municipal law that will apply to the people of 11 Western States. I do not criticize them. The Lord knows that I have studied this subject as thoroughly as I could. They are much abler gentlemen than I am, without any doubt. But I would not undertake, if I were vested with all the power there is in the world, to prepare municipal laws that would fit 11 different States and an innumerable number of cities and institutions and industries diversely and differently situated. And there is the whole vice of this entire legislation. It undertakes to do what the Congress does not pretend to do for any other State. It undertakes to do what it could not do for any other State. It undertakes to do what it does not pretend to do and could not do for any other industry.

That is to say, to legislate municipally and to pass upon local questions of policy that have been forever committed to the several States by the Constitution of the United States. And before I get through I will argue with you a little that if you had the power to amend the Constitution and to do this thing, when it was put square up to you in the plain English whether you would think of doing it or not, I do not think you would. But I am talking about the situation that is now presented, that this is an effort, mind you, to say what power shall be developed, what water shall be appropriated, to what uses they shall be put, what connections shall be made, what distributing company shall receive power, what rates in certain instances shall be charged, and as to whether physical connection shall be made or not. It is an effort to say all and every one of those things; further than that, it is an attempt to put into operation a

law that 50 years from now will control the processes of eminent domain of 11 States of this Union.

Finally, when we get down to this thing we find in an examination of this law that it would not get anywhere, that it would not accomplish anything; it is no criticism upon these gentlemen who have undertaken a physically and mentally impossible task of the United States going into the business of framing municipal legislation for all of these States and all of these communities. Mind you, most of the States delegate such authority quite generally themselves. They provide as to what cities and districts and other subdivisions may do, because the State even can not adequately legislate for all these different localities and conditions. Therefore the State turns it over to the cities or districts, such as irrigation and reclamation districts. But this is an act of the Congress of the United States purporting to regulate the conduct or to give to the Secretary of the Interior the power of regulation of the conduct of every one of these States, cities, municipalities, and connected public service.

What I want to call your attention to is that it is the first time the Congress of the United States has ever even been requested to legislate in such a way. If there is any other time or any other similar legislation in the whole history of this country, which I assert there is not, it is up to the gentlemen to bring it forward and show it to this committee if there ever was such legislation, because I assert that there never was. Mind you, that brings me, in the consideration of this first section, to another matter that I will point out.

Senator WORKS. Before you leave that subject, Mr. Short, let me ask you a question.

Mr. SHORT. Yes, sir.

Senator WORKS. In California we have now, by a late statute, a water commission that has complete control over the uses to which the waters of the State shall be applied. They have the right even, under that statute, to determine the quantity of water that shall be used by different claimants upon the same stream, and to what purpose the water shall be applied.

Mr. SHORT. Yes.

Senator WORKS. Now, under that statute the State would have a perfect right to determine that the water upon the stream that was claimed by a power company should not be used at all as against claimants for irrigation purposes, would it not?

Mr. SHORT. Absolutely.

Senator WORKS. So that it would have the right practically to nullify this statute by State regulation or State control, would it not?

Mr. SHORT. Well, that would raise a very important question. It would raise the question of whether they could nullify it or not, and I think they could.

Senator WORKS. It may not do it directly, but the result of it would be the same if the State should determine that the water could not be used for that particular purpose.

Mr. SHORT. Yes.

Senator WORKS. The Government has no control or right over the water, but only over the land upon which the power plant may be situated. There would be a direct conflict between the State and the Federal Government at the very beginning. It seems to me that

this statute throughout is bound to bring the two Governments into conflict upon many questions that would arise.

Mr. SHORT. I could hardly assume that it was not drawn for that purpose. It does it so often and so directly that it must be so intended to divest the State of the control that exists over other similar industries in the States and in all States where there are no public lands, and over the industries in that State that do not happen to be upon public land.

Senator SMOOT. Mr. Short, from what you have heard at these different hearings, have you come to the conclusion that many of the others attending the hearings have, that no bill that does not give the absolute control of the water within the State to the Government will be satisfactory to Mr. Pinchot or Mr. Fisher? And, in that connection, I want to say that Mr. Pinchot has told me time and time again that he has no confidence whatever in the utilities commissions of the States; that they can be controlled by politics within the State; and that he did not, so far as he was concerned, propose that the Government of the United States should release its control over the water powers of the State for that reason.

Mr. SHORT. Well, of course I am familiar with this opinion. If this committee undertakes to satisfy the Constitution of the United States and Mr. Pinchot and Mr. Fisher and Mr. Garfield they will never accomplish that, because they are irreconcilable, and there is no doubt about that. And I say that with the greatest of respect for those gentlemen. Mr. Pinchot, who is the developer of this idea, with all of his lovable traits, I think, has the most fanciful and unreal mind of any man that ever undertook to legislate in any country. I am very sincere in that, and I say that with all respect to Mr. Pinchot. I think, from my experience with him, that he has read nearly everything in the world except the Constitution of the United States. But if he has ever read that instrument he has never so indicated. His whole idea was, from the begining, first, that there was no power or intention in the States to regulate their utilities or industries, and now that it has been gradually forced upon him, not only that they have the power but that they are doing it very effectively in certain instances, he then has developed this novel doctrine—but I believe it has some historic importance in the United States of America—that if a State, in a matter undeniably not committed to the United States, does not exercise its own power that the United States may come in and appoint itself guardian ad libitum and perform those functions for the State.

I wish very briefly to discuss that subject, and to point out some very new and lovable things that the United States could do, if that doctrine was the true doctrine, in the exercise of its powers. Under that doctrine the United States would have the right to legislate upon every subject under the heavens. If the State would have the right to do it if it wanted to, but it need not do it if it does not want to.

Senator SMOOT. I do not want to be understood as criticizing Mr. Pinchot's position in what I stated.

Mr. SHORT. Yes; I understand.

Senator SMOOT. I simply made the statement, because I believe it to be an absolute fact. Nobody has defended Mr. Pinchot's forest policy on the floor of the Senate, I suppose, more than I have. I remember well when the question was first mooted, of controlling

the water and leasing the water within the States, and leasing lands within a State. I told Mr. Pinchot then that I thought he was discussing a proposition that was an unwise one and could hardly be sustained by the Constitution of the United States. I simply make the statement because I do not want it understood that I have in any way criticized him as a man.

Mr. SHORT. The idea seemed to arise out of a lack, it seems to me, of understanding or appreciation of the efficacy of the laws of the several States and of the United States. And I will just say, in passing, on that point, that I want this committee all the time I am talking to keep in mind that there is no effort on the part of any of these industries developed on the public land to keep away from the laws either of the State or of the United States. The laws of the United States and of the several States do not operate because there happens to be public land in the State; they operate because they are the supreme law of the land and of the several States, and they operate upon all industries alike, and this Congress could not, if it tried, exempt any industry operating upon the public lands from the full operation of all of the laws of the United States. Of course they could repeal the laws, but I mean if the laws existed. Neither could they exempt them from the operation of the Constitution of the United States or from the laws of the several States identically with every other similarly situated industry, whether upon the public lands or not.

There can be no effort upon the part of these corporations to escape regulation, or to escape governmental control, because if exemption from this special regulation is that, then 90 per cent of the industries of the United States have already escaped. These and all other industries are under the Constitution and laws of the United States and under the Constitution and laws of the several States, but most of them are not on the public lands, but all are under and none have escaped from any law and if the laws of the United States are to operate equally and uniformly throughout the United States they must operate under the Constitution of the United States and the several States uniformly as upon each and every other industry in the United States. Otherwise the law violates the fundamental principles upon which this country was founded, and if they do operate differently, or if the United States operates upon an industry upon the public land as a government in a different way from what it would operate upon an industry not upon the public land as a government, then there is not uniformity of law, there is not uniformity of operation of the law in the United States. And that can not be gainsaid. These gentlemen have seemed not to be able to realize the complete efficacy and power that is in the States and in the Nation. The powers of every State are reserved to that State, which powers are absolute; they have all the powers that any other Government has in this world except the powers that have been delegated to the Government of the United States, and it exercises those powers as completely as though they were inherent in the United States.

Senator CLARK. May I make a suggestion there? I suppose you will reach it in due time, but I want to call your attention to it now. I reckon the claim is made that in this bill the Government is acting in that particular more as a proprietor of the land than as a sovereign

power, and that any terms on which the lease or permit should be granted is more nearly akin to the conditions that might be put into a lease of land by an individual proprietor rather than the assertion of a right by a sovereign power.

Mr. SHORT. I suppose, Senator Clark, that must be so.

Senator CLARK. I suppose that must be so.

Mr. SHORT. That is to say that is the motive or the thought, but that it can not be true, that it can not so operate, is as well settled as anything is in the decisions of the Supreme Court of the United States. And I shall later come to those decisions.

Senator CLARK. I am not now expressing my opinion.

Mr. SHORT. No; I understand.

Senator CLARK. I am expressing what I understand to be the theory as urged by these gentlemen.

Mr. SHORT. Now, gentlemen, since I shall have briefly to refer to these same subjects in connection with the presentation of the main question, I will proceed with the discussion of the sections of the bill.

Section 2 provides:

> That each lease made in pursuance of this act shall provide for the diligent orderly, and reasonable development and continuous operation of the water power, subject to market conditions, and shall provide that the lessee shall at no time contract for the delivery to any one consumer of electric energy in excess of 50 per cent of the total output.

Now, that section has been discussed a great deal, and I presume it is conceded that it is one of the sections that will be subject to certain amendments. However, I think that these matters should be frankly discussed, and any additional suggestions as to why these provisions should be amended, or these several sections should be amended, should be stated.

In the first place, this section 2, and nearly every one of these sections, is subject to the criticism that it is an assertion of municipal power, governmental power in the United States to regulate an industry wholly within a State, and in that connection it is either abortive and void, or else it presents an element of conflict. I know of no other instance where it is claimed—that is, where a similar conflicting nonconstitutional power is claimed by the Federal Government. It may be that in connection with the constitutional duties of the States to regulate their internal industries, and the constitutional duties of the United States to regulate interstate commerce, that there come places where there may be an apparent conflict, but those conflicts are not official, and they therefore are legal and adjustable when they get to the courts, but when you get a conflict between two officials that is not constitutional or fundamental or legal, but merely individual, then you do not go to the court, and I do not know where you do go. The power companies would generally go to the scrap heap. That is about what will happen if such conflicts arise.

In that connection, for instance, so far as the development is concerned, you understand that in all the States, or in most of them at least, in the event of water appropriation, a notice has to be posted or should be posted, and then a certain character of diligence is required in the development of that water right, otherwise it is lost. In other words, under the law of California, the old law, you had

to post a notice, and within 60 days after the notice was posted you had to begin work, and you had to prosecute that work diligently and uninterruptedly, except as interrupted by the elements, to completion; and the diligence required was in proportion to the size and magnitude of the work.

Now, in the permits under which we have been operating there has been a certain specified time, with mere power of extension. If you are developing a water right, which is the essential thing, and maybe and usually 90 per cent of your right of way belongs to somebody else, should the person or government that has 10 per cent of your right of way have a right to dictate anything to you at all except that you comply with the law under which you are operating and appropriating the water and establishing a public use within a State? The consequence is that there is an uncertainty and an unavoidable conflict and an effort to delegate to the mere possessor of the right of way over an incidental piece of land, however important or unimportant it may be, the right to say how a water right under the laws of a State may be developed, or whether it may be developed at all or not, and how a public service can be carried on. It is also provided that you shall build subject to market conditions.

I think I had better pause here and state very briefly what the conditions are in California, and also state that they are similar in some of the other States, and can be made identical in all of the other States. And one of the cherished delusions of my friends who have been on the other side of this matter is that if the laws of the States do not at the time provide for the regulation of monopoly, that the monopoly can get in and acquire vested rights. Keep in mind that these so-called monopolies can get in any way except in the instance where there are public laws. In most instances they can not stop it from getting in, and it is assumed that they could, and in all other instances will, get in a State and get some rights the States could not regulate. There is not anything more fallacious under our laws that the States are without such power; that is to say, whatever rights the State has to regulate except to take away vested rights of property, it may regulate fully, with the right to regulate the industry, to compel service, and to fix rates, and do everything down to the point prohibited by the fourteenth amendment to the Constitution of the United States, namely, confiscation. Such right exists in every State, and it exists just as well whether it has been at the time enacted into statutory or code law or not.

Therefore in California we are doing now what they can do in every other State—that is to say, we are regulating and requiring approval and a permit now for every appropriation of water—and that body regulates how far the appropriation shall go on, how diligent the construction shall be, how much and where and when the water can be taken, to what uses it shall be applied, and within what time it must be applied. It also requires, especially if it is a power company and where some other company wants to receive some of the service, if they do not voluntarily give it to them, they go to the State board of railroad commissioners, and if you have the power for the service you must give it to them.

This act undertakes to give to the Secretary of the Interior the power to say that a public-service corporation can not make a physi-

cal connection in a State to supply such a community which the State says shall be supplied. I am not assuming, of course, that in any ordinary case the Secretary of the Interior would refuse any such thing, but I am asserting that it is ridiculous, unnecessary, and a serious infringement on the certainty of investment and an assertion of governmental right of the United States to undertake to vest, in the case of these industries, any such power in any such official, because he can not have it over any other industry in the same State, and he can not pretend to have it in about four-fifths of the States of the Union at all; and therefore, if that particular industry is subjected to that particular kind of exaction and that exceptional and conflicting power, is it not to be presumed that people who expect only 5 per cent interest and no profits are going to invest their money in the development of such industry when there are other industries more firmly situated, not affected by such conflicts and such regulations and such conflict of control?

You know and I know that the industries of this country are crying and begging for revenues and funds for their development, and those revenues and funds are going to those industries that rest on sound and definite laws and where there is no conflict of authority and no uncertainty as to whether the right can be continued or not, and as to whether, if the State says you shall serve, the Secretary of the Interior may say you shall not connect, and as to whether, if the Secretary of the Interior says you shall connect, the State shall say you shall not, because the State is freely using its power in this way; and I want this clear, because this subject seems to be clouded from what some of the gentlemen have said. If a power company has power for distribution in the State of California, it is a public-service corporation, and it is under the entire jurisdiction of the State board of railroad commissioners. If you have the power and anybody demands it you must furnish it, and the rates for every bit of this power are fixed, and there can be no discrimination, there can be no higher nor lower rate or different service than that approved by the commission, and if you want to go into a district or territory where you have not been giving service you have to apply to the State board of railroad commissioners for a certificate of necessity and public requirement, and they investigate the territory, and if they see there is another company or two companies already in there—that their transmission lines, their generation of power, their physical connections, are equal to the economical use and successful service of that district—the State board of railroad commissioners says, "You can not duplicate those transmission lines; you can not duplicate that power; you can not duplicate that installation; you can not duplicate that distribution and the service and the expenses, because if you do we will have to fix consumers' rates nearly twice as high for that service as we would if it was being furnished by one company."

This gives the unrestrained power to the Secretary of the Interior to agree or not to agree with each and every one of those functions, and it is unnecessary, it is hurtful, and, in my humble judgment, it is quite unconstitutional.

Senator WORKS. I was just going to ask you what would happen if the railroad commission in California should require a developing company to supply more than 50 per cent to one customer and

the Secretary of the Interior should declare that it should not be done. Which jurisdiction would control in that instance? They would be directly opposed to each other.

Mr. SHORT. I have no doubt at all that the State would control; but we are now in the Congress of the United States. I have not worried very much about these regulations of this kind so long as the Congress of the United States had not authorized the Secretary to make such laws or regulations, he having merely usurped or assumed the right. I would not hesitate to say that neither such an official nor even the Congress has such power, but I would not like to be put in the position of having to advise disobedience of one of those orders, much less a law of Congress; but yet I think that is what I would have to do if it came up.

Senator WORKS. But in this instance it is not left to the discretion of the Secretary of the Interior.

Mr. SHORT. No; it can not be done.

Senator WORKS. It is an absolute provision in the bill itself.

Mr. SHORT. Yes; it provides that it can not be done. Then I would have to advise, of course, either a disobedience of the law of Congress or a disobedience of the law of the State, and the order of the railroad commissioners of the State. I do not want to iterate and reiterate, but if there be any necessity for this thing, if there be any necessity for the assumption of any municipal powers or regulative authority in this bill at all, please tell me what it is and how it arises, for the simple reason that there are in California and every one of the public-land States developments that are not upon the public lands, and many of those developments that are wholly or partly upon the public land could be taken off if necessary, and they would not be touched by these laws. That being so, and it being true that more than 90 per cent of the industries of this kind are not subject to this character of regulation or municipal control, what excuse, in the interest of the public, can there be for the effort to apply that peculiar character of regulation and municipal control to an incidental 5 or 10 per cent of an industry throughout the United States?

The last clause falls directly within what I have been saying:

> And shall provide that the lessee shall at no time contract for the delivery to any one consumer of electrical energy in excess of fifty per centum of the total output.

Now, I tried to make out why that was put in there in the public interest, and as I can discover no reason at all, the only conjecture I can indulge in is this: It may be that the Secretary or his advisers think that while they could control—think that they could control—the industry or the public-service corporations because it was incidentally using the public lands, they also are apprehensive that if that power was served to somebody else or to some other public-service corporation in the State they could not control it. There can be no reason, from the standpoint of development or of the interests of the people, that I can discern why, if the company should go into the mountains and develop power, and if a consumer came along—and there may be one already connected up that wanted to take all of this power—why it should not do so under and subject to the laws of the State.

Some people have been alarmed at the idea—and I will take that subject up now—that if one company was developing the power and

was contracting for its delivery to another company, that the contract between the two companies would fix the wholesale rate, and whether that was higher or lower than it ought to be, that it would enter into the rates that the people would have to pay.

The CHAIRMAN. It think it is generally conceded that that ought to be eliminated from the bill.

Mr. SHORT. Therefore, in dwelling upon that subject or concluding on it, the law is that every such contract is made with deference to the right of regulation by the State. And, just as an illustration, a short time ago a company I represented was delivering natural gas to Bakersfield under contract with a natural-gas company connected out in the field for the delivery of a certain amount of gas at a certain rate, and our company was delivering it to the town. Application was made for the adjustment of those rates, and the State board of railroad commissioners took it up and made slight reductions and adjustments, so far as the distributing rate in the city was concerned, and they cut the contract rate nearly in two in the middle. I was the attorney for the company; and we thought the cut was pretty hard, but we did not doubt the authority of the State board of railroad commissioners to cut that contract just as freely as if it had not existed. In other words, the question is, what is invested, what has been the cost of the development of that industry, how much did it cost to create it, what is the reasonable worth, what is the cost of operation, and what are the necessary expenses. And on that the rate is fixed, and there is no other basis, and therefore this provision in this law is not only an improper usurpation of power, but it is wholly unnecessary.

I now come to the provisions of section 3. That is the section that provides:

> That in case of the development, generation, transmission, and use of power or energy under such a lease in a Territory, or in two or more States, the regulation and control of service, and of charges for service to consumers, and of the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior or committed to such body as may be provided by Federal statute.

The only criticism I have of that is this: I do not question—of course, no doubt, it will go to the Supreme Court of the United States, and it will decide—but I am inclined personally to the view that it will decide that it is interstate commerce and may be regulated as such; but we assume now, of course, necessarily, for the purpose of this argument, that it has such a power, but what I want to call to the attention of this committee of the Senate is this, that if interstate power distribution is to be regulated all interstate power should be regulated, should it not? Can anybody give any reason why, if on the Columbia or Lewis Fork or any place up there in Idaho a power development exists that runs into two or three States, why, if that should be regulated as interstate commerce, all power companies in the United States similarly situated, whether they are developments of hydroelectric power on public land or not, should not be similarly regulated? And is the Senate of the United States going to come down to the proposition of saying that in certain instances a few industries in a few States shall be regulated as interstate commerce and all the other industries in the United States sim-

ilarly situated and carrying on a similar business shall not be similarly regulated? Let me say to you that it is of the highest importance that the laws of the United States shall operate uniformly throughout the United States, and that they shall operate uniformly upon all industries, because if they are good laws they ought so to operate, and if they are bad laws and they operate uniformly they will not be continued; but if they are bad laws and they operat only on a few people and a few sections of all the United States we do not know how long they would continue, because the whole people of the United States are not affected, and are not similarly interested, and this situation is not proper and it is not right.

Therefore all I have to say about that is that I do not object to nor argue against this Congress adopting an effective law for the regulation of all interstate commerce by the same competent authority. I do not suppose, if they were going to do it, they would leave it to the Secretary of the Interior, who comes in and goes out every time the administration changes, and sometimes when it does not change, but I suppose they would vest it in the Interstate Commerce Commission or some other orderly, continuous, and coherent body that would regulate it in a high-class, uniform way and under permanent rules and under permanent law. I suppose they would do that.

But I want to insist before you gentlemen that no law for the regulation of interstate commerce or any industry should be incidental to the location of that project upon the public lands but to the question of whether or not it generates and distributes hydroelectric power to two or more States in the United States. And, then, if it operates as to one of the States, it should operate as to and in all of the other States and on all similar industries. I should be very glad to hear any argument as to why this regulation should come in this way in broken doses, and some reason why this Congress should undertake to single out this particular industry in these particular localities and States, because if these people and these industries need such regulation others need it just as much and maybe more. I not only believe that the effort represents an unnecessary and inexcusable discrimination, but that the United States could not and can not single out such industries and impose upon them such unequal laws, even its own laws, much less with respect to those operating exclusively under State laws.

Senator STERLING. Is not this provision in section 3 just a reservation of the power which Congress has, anyhow, and which it might exercise at any time, or which might be exercised at any time with reference to powers developed on private land, but which were transmitted from one State to another?

Mr. SHORT. Senator, of course, that would be logical, but that is not the way it reads. It says:

That in case of the development, generation, transmission, and use of power or energy under such a lease—

It does not apply to anything else, you see—

in a Territory, or in two or more States, the regulation and control of service and charges for service to consumers and of the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior or committed to such body as may be provided by Federal statute.

Senator WORKS. That would leave the administration of this law affecting every corporation in the hands of the Secretary of the Interior, and all of the balance would be in another body entirely.

Mr. SHORT. For the present it is not in any body; it is now conferred upon the Secretary of the Interior, and the inference—I do not call it a reservation, however—the inference is left that some other body may be created, and that it shall regulate it; but here it says it is conferred upon the Secretary of the Interior.

Senator WORKS. Whether some other body is created or not the power undoubtedly exists in the National Government to deal with interstate commerce, whether it be in power or something else.

Mr. SHORT. I do not want to say anything that seems at all extravagant, but I do wish to say to this committee that most assuredly I have not any objection to a reservation in this act of the right of the Congress of the United States to regulate interstate commerce, if this is a constitutional right and duty. It would seem to me, however, that it would sound rather kindergartenish, if I may use the word, in a law passed by the United States Senate to reserve, in conferring a right of way for a corporation developing a water power over public land, the constitutional right to regulate interstate commerce, for I would not be any more afraid that it would take away that constitutional right than I would that it would unvest the right of God Almighty. We all know that no constitutional right or duty that the United States has could be relinquished by granting a right of way over the public land, even if they wanted to do it.

Senator ROBINSON. They could not legislate that way, and no matter what law we pass, Congress could exercise its right under the Constitution to regulate commerce between the States.

Mr. SHORT. Of course, the grant of this right of way is no more a vested right than the acquisition of any other right in property, so far as the right exists, but I say if there is any doubt about that particular right, about any vested right interfering with the right of the United States to regulate commerce, which, of course, I firmly believe could not be done, there is no objection in the world to inserting such reservation. But it simply seems to me that it sounds like we were putting up scarecrows. Of course, if there is any such fear, I have no objections to it.

It is a little out of order, but that brings me to a suggestion I want to make. I think that perhaps about the only sound argument, one that has some significance, is the argument that the Federal Government is giving these rights away. That is to say, under the act of 1866, that did an immense amount of good, and nobody ever found it did any harm until this idea of municipal government developed—under that act, of course, these rights of way accrued and vested like any other rights vested in any other landowner.

It is stated that the power companies —and, of course, other companies are similarly situated. The power companies are not the only people that are public-service corporations and that charge the people for that service, and one is just as much a monopoly as another that they will get from the Federal Government valuable rights for nothing, which they will capitalize, and upon which they will charge earnings, and where, if the people later want to acquire these properties, they will be acquired at great expense. If the United States Government has any rights in connection with this

matter—and I assume that it has—it certainly would be the right of the Government to provide as to how the right it grants should be disposed of and the tenure under which it should be held, provided that tenure does not interfere with the duty and necessity of continuing a public service in a State.

Of course it could not stop that, in my opinion. I probably have had as much to do with this as any other one person, and I probably speak for as many of those interested in this development as any other one person, and I say this, that if you want to put into this law in language just as comprehensive as you can, that these rights received for the rights of way, dam sites, reservoir sites, and power sites, whatever they may be, upon the public lands are dedicated to the people who receive the service from these corporations, and that they shall never be capitalized or charged for in excess of the amount that is paid for them, I think that that legislation would have some tangible and reasonable application, and that it would remove the only argument, and it is not a large one, and these rights could not be capitalized under the laws now existing for very much, but if they can be, and if the United States is trying to aid developments in the West to the advantage of people in the West, then let it be written in the law that these rights are dedicated to the public use and that they shall never be the basis of any charge or compensation in excess of the amount that they cost and that the Government exacts either for their use or for their conveyance. That, it seems to me, is the sum and substance of all that could be claimed, because all that the United States is giving to anybody are these rights of occupancy and use. It has given them freely to the people of the United States ever since the country was founded and upon conditions where they could capitalize them and use them for whatever they might be worth, but we are quite willing, at least I am, speaking for myself at least, that if they come now to the remaining people and the remaining States that they shall go to those people and to the service and that they shall not be capitalized and that they shall not be the basis of any earnings, and that if the States and municipalities take them over that they shall not be received by the corporation for nothing and then be made the basis of large exactions or any exactions whatsoever from the people.

The provision proceeds:

That the physical combination of plants or lines for the generation, distribution, and use of power or energy under this act or under leases given hereunder may be permitted, in the discretion of the Secretary of the Interior—

Otherwise it could not be done—

but combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade with foreign nations or between two or more States or within any one Sate, or to fix, maintain, or increase prices for electrical energy or service are hereby forbidden.

Now, of course, it is largely a reiteration, but if present antitrust laws of the United States are not sufficient they ought to be amended, and they ought to be made sufficient to apply to all the industries in the country. If here a saving clause is desired, as in the other instance, of all of the laws that this right is granted subject to all of the laws of the United States and of the several States applicable to these unlawful combinations, well and good. If this is the same, there is no necessity for it. If it is different, what excuse can there

be in saying that these industries shall operate under different laws and restraints?

So far as the laws of the States are concerned, those are absolutely lost sight of. The acts are forbidden whether they are lawful in the States or not. Why, gentlemen, in California, we are not compelled to agree, because we can not agree, but we are absolutely compelled to do exactly what such an agreement would amount to. That is to say, the agreement would be not to render the service in the same district. The State compels us not to render or to render the service wherever it chooses. Therefore, so far as combinations or matters of that kind relating wholly to a State are concerned, it is elementary—absolutely elementary—that those combinations are lawful or unlawful as the State may say. The policy of one State is more liberal than another. The policy of one State is to leave it to competition. The policy of another State is to leave it to regulation. And that is true throughout the United States. Therefore, to say that these selected industries, operating on the public lands, in whole or in part, shall be, in express language, prohibited from doing certain things within a State, is to say, if it could be enforced, that these particular corporations or industries may not do, in that State, what other corporations may do, and that the corporations of that State on the public lands may not do what other corporations in other States may freely do within those States.

If this bill was framed to embody the declaration that the public lands States could not control their domestic industries when they come in conflict with the public lands, and that their laws would not be efficacious, it could not have been framed more directly to tell the States that thing. However, as I shall submit to you from ample authorities, such a provision would be inoperative. But what I wish to call to your attention is that no matter how firmly we may believe that the language of a bill violates the Constitution of the United States, no man is going to buy bonds secured by an industry that rests upon an opinion of a lawyer, no matter how eminent that lawyer may be, that a law of Congress is not constitutional. If he takes a chance on the constitutionality of a law of Congress he is not going to do it for 5 per cent; he is going to have bigger interest. And if he must put his money into an industry where there is a question of whether the industry rests upon a constitutional and legal security, he is going to put it into an industry where the law does not say that if it does certain things that other industries may do it violates the law, and especially where its lease is subject to cancellation.

I could say more on that, but it is so much a reiteration of what I have said in regard to other matters that I do not think it is necessary.

The remainder is practically a reiteration of the same line of provisions.

That except upon the written consent of the Secretary of the Interior no sale or delivery of power shall be made to a distributing company, except in case of an emergency, and then only for a period not exceeding thirty days, nor shall any lease issued under this act be assignable or transferable without such written consent.

Well, I do not know what would happen to us if the State ordered us to act and the Secretary of the Interior refused to let us act.

The CHAIRMAN. I think those who are supporting the bill are disposed to eliminate that feature.

Mr. SHORT. Yes. Well, I imagined it would be eliminated, but of course these things are regulated and controlled by the States or, if they are interstate, by the Federal Government, and of course the regulation should be uniform.

Senator WORKS. I think you should say what you want to say about those things, because there has never been a quorum of this committee present. When the chairman says there is a disposition to eliminate that, I think that is true so far as those who have been here are concerned.

The CHAIRMAN. I said those supporting the bill were disposed to eliminate that. I do not know what those not present are inclined to do about it.

Mr. SHORT. As to the nonassignability of these leases, I understand that that is an iron-clad rule in the Department of the Interior, and I presume that I could not convince the members of the department that they are wrong about that, but I am still firmly convinced that they are wrong, and, in brief, I will tell you why.

A great majority of these rights and uses are not held as private property. If anybody should come to me and ask me if he could take a lease or a permit for the appropriation of water for irrigation or power so that when it expired or if there was a prohibition against the assignment, that if the municipalities of the States tried to take it over, whether that would stand in the way or not, I would ask him if he were joking. Because, of course, no such thing can be done. What we are dealing with here in 90 per cent of the cases is solely general laws applicable to public use and service. If I am not frank and fair in these matters I am trying to be—it might be a safeguarding provision to provide that this right of way could not go to anybody—to anybody at all, except to the State or person to whom the water right or public service was assigned or where the duty rested; in other words, it is unspeakable that these rights of way can be held anywhere or can go anywhere, except that they must be continuously vested in the public service and used for and with the water right.

We may assume again that the Secretary of the Interior would not refuse an assignment in a proper case, but since all other rights of way pass with these uses, why would not Congress be relieving the Secretary of a lot of expense and trouble—and I assume that he does not want any expense and trouble that he can avoid—to say that he could not have the responsibility where he has no power, and should not have any power; and of course in such instances he should not, because the right of way is indispensably and irrevocably dedicated to the public service.

These rights of way are incidental to the water rights; they are incidental of the public service; and they are inseparable from the water rights and from the public service; and all that Congress needs to say, and all that it should say, is that they shall be inseparable and shall go together, and then we will have workable laws; we will have a law under which we would not be looking two ways at the same time; we would not have to be looking to the State authorities and to the Federal authorities at the same time; we would not have to go to the capital of the State and to the Secretary of the Interior every time we wanted to do anything that inevitably

and inexorably must be done one way when we get through, and ought to be so done. And so long as the power is enjoyed and used, so long as the people are being benefited, and since when it is assigned it goes, subject to the law and the lease in all of its provisions and regulations, in the interest of the people, what objection can there be to saying that this thing may be assigned without the trouble and expense and uncertainty as to whether or not that discretionary power will be properly exercised, especially in cases like this, where the right of way is incidental to the water right and inseparable therefrom and both are usually dedicated to the public service?

This brings me to what I regard as one of the most hurtful provisions of this act, and I am quite frank to recognize that doubtless you gentlemen have thought I am finding a great many hurtful provisions in this act. The reason for that is this, as I have previously said, that if we are correct about this it rests in the fundamental error of committing these particular industries to an authority which has no right to exercise control over them, and in cases where the authority may exist as to interstate commerce and should be exercised, that it should be exercised also as to all similar industries.

Now, this clause:

That no lessee under this act shall create any lien upon any power project developed under a permit issued under this act by mortgage or trust deed, except approved by the Secretary of the Interior and for the bona fide purpose of financing the business of the lessee. Any successor or assign of such property or project, whether by voluntary transfer, judicial sale, foreclosure sale, or otherwise, shall be subject to all the conditions of the approval under which such rights are held, and also subject to all the provisions and conditions of this act to the same extent as though such successor or assign were the original lessee hereunder.

What can be necessary except the last clause? What we are all working to is the adequate development of these resources, and a power company or an irrigation company is organized, capitalized for so much, bonded for so much, and possesses so much property. Now, it is not only frequent, but almost uniform, that as the State regulations and laws increase and as the laws of the Federal Government increase—they are mostly regulations, however, I should say—that developments can not by any possibility be made in connection with a new project and develop it—entirely new. If you have an established basis of earnings, if you have an established water right and you have a vested right of way, and then if you want to add two or three or four times as much to the hydraulic development and extend the service further over the country, and give the people more service, and put in this developed industry and this developed income, and you have a new stock issue and a new organization, a new bond issue—that would look like and would be a regulated monopoly. I want to ask you, however liberal we may assume that the Secretary of the Interior will be, we know that under the laws of the State those things are regulated by certain local conditions, but here they are regulated by no conditions at all. What investor of capital in a developed industry, where he can not afford in the first instance to make it adequate to ultimate proportions, because it is taxed in proportion to its size and its stock and bond issues, etc.—how can he afford to take all these chances if it is provided that arbi-

trarily the Secretary of the Interior, who does not exercise any such power over any other similar industry in the world, may say, not under law but merely that in his judgment the thing ought or ought not to be done; that that bond issue shall not nor shall the stock issue be increased; that the corporation shall not be managed or manipulated as the laws of the State permit? I ask you what investor in bonds or stocks can be secure if the arbitrary authority, power, or control is by law vested in one man, who can say, "You can not reissue your stock; you can not reissue your bonds; you can not enlarge your plant; you can not consolidate, because I regard that as a monopoly and I will not approve it, regardless of your State laws"?

I do not believe in uncontrolled monoply. The State of California does believe in monopoly where it is properly controlled and regulated. The Secretary of the Interior or some of the gentlemen who have spoken here do not believe in monopoly, controlled or otherwise. Where is this going to end? Let me ask again how under such a law can industries be developed? These gentlemen even now appear here with conflicting views; both are to control the same industry. How can it develop or prosper?

To sum up on this point: The unrestrained power in the Secretary to approve or not to approve a lien or mortgage is, in practical operation, equivalent to a direct statement of full control, and amounts to giving such direct control over all matters of stocks and stock issues, bonds and bond issues, and every matter pertaining to capitalization, stocks of all character, bonds, and underlying security. And since we are informed by the testimony that the departmental official in some respect are not now in accord with State views on these subjects, we must assume that projects approved under State laws would not receive departmental approval, and mortgages and bonds approved by State authority would be disapproved by the Secretary. Under such a provision as this men investing in preliminary expense necessary to such a development, sometimes running into millions, in the presence of authority regulated by no existing laws, could never know whether they could finance mortgage bond or remortgage or rebond or consolidate properties or not, and since they could have no existing law or other standards controlling the situation, would not take the chances, and no developments of any consequence could occur or would be made.

In passing I want to say that this is the first time, I think, any one of us has ever seen or heard of a law that was passed by one of the branches of the Congress that nobody defends at all. It is confessed here by the best friends of this bill that if it was passed in a half a dozen respects it would be absolutely prohibitive and absolutely destructive.

Mr. FINNEY. That has not been admitted for a minute by the friends of the bill.

The CHAIRMAN. I wish to say, from my knowledge of the bill, I do not admit that. Yet I feel disposed in many respects, upon the urging of the water-power people and their representatives, to grant them some concessions in this bill. I do not admit, so far as I am concerned, the statement you have made. But I am willing to concede, in the interest of reason and justice, certain amendments that have been suggested.

Mr. SHORT. Of course, it may be in saying that it was admitted to be destructive I was using more positive language than I should have used. But I shall come to a section of the law in a moment that I think everybody will admit, including the friends of the bill, that if it were left in there it would be absolutely prohibitive of development. I think so, and what I want to point out now is that I do not believe more eminent or able men could have been found than have drafted this law and have worked on it. But the United States Government has a great deal to do in connection with the common defense and general welfare in the disposal of the public land, and if it comes down to regulating the municipalities and the States and the industries, and all that sort of thing, I imagine we will be confronted to the end of time with just this sort of confusion. The United States Government can not successfully legislate on such a subject, and it ought not to be done that way. And that is the reason I think we find in this bill an alarming number of things that are confused, ill-advised, or inadvisable at least, and that ought in the public interest as well as in the interest of these developments to be amended or eliminated.

And let me say here, Mr. Chairman, that I am firmly convinced that any bill passed here that is not in the public interest will not be in the interest of the power companies. And I want to say that the whole difference of opinion—and I hope I shall have the consideration of the gentlemen upon this point—the whole difference of opinion as to what is in the public interest rests upon the question as to whether the Federal Government should exercise governmental powers and municipal authority in the various States through the public land or whether it should not do so. That is to say that it should exercise the same powers over these industries that it does over all others similarly situated, which it, of course, can do regardless of this bill, and should exercise no exceptional or additional powers over these industries. It has been frequently said that the charge that is here proposed to be exacted is not for the money but for the control. That brings up the question of Federal municipal government over the particular industries in public-land States. Therefore, if we can eliminate the idea that the United States can or should exercise peculiarly municipal authority in conjunction with the public lands and industries thereon, then the public interests and the interests of development and the interests of the Federal Government are one, because then the United States can benefit the western people by doing the same thing for them that it had to do for the eastern and southern people. Except for desired municipal control, the Federal Government wants these rights of way vested in such a way as will promote the development of the industries of the State, that will not tax the industries of the State, that will put no burden on the people who develop them, and will give a tenure that will run coordinately with the right to appropriate and use the water and continue them for the public service.

Therefore I am speaking as much to the gentlemen working for this bill as I am to the committee, because we are all interested in a sound and workable law. What we want to do is to get down to the proposition that these industries can be regulated and should be regulated under the Constitution of the United States as all related industries are, and not differently. They should be taxed the same as

all industries are, and not differently; and they should be left to the control of the State, as all industries are, and not differently. And if we can get to that, then there is no quarrel between myself and these gentlemen who are working in the public interest, as I hope I am, and I know that I am convinced that the power companies can not afford to have a law here for their development, for their interest, to create any monopoly for them or to exempt them from the operation of the Constitution of the United States or of a State. They can not afford anything of the kind; and they are not asking anything of the kind. But they are asking to be left under the same law and the same regulations, under the same control that every other industry similarly situated and rendering a similar service is under.

(Thereupon, at 12 o'clock noon, the committee took a recess to 2 o'clock p. m.)

AFTER RECESS.

The committee reconvened pursuant to the taking of recess.

STATEMENT OF FRANK H. SHORT, ESQ.—Continued.

The CHAIRMAN. The executive session of the committee adopted an order that the hearings as to all except Members of Congress conclude not later than Wednesday night of this week at midnight, and that after to-day—I do not think it was intended to apply to Judge Short; it was intended that he go ahead and finish, provided he did so to-day, of course—that after to-day the time be divided equally between those who are for and against the bill, with the understanding that if either side does not take quite all its time the other side can have it, and that they shall get together and agree among themselves who they want to speak, how long each is to speak, and arrange that among themselves. I hope those interested on each side will do that this afternoon and be ready to proceed on that plan to-morrow morning at 10 o'clock.

Senator SMOOT. In that connection I should like to say, Mr. Chairman, that we do not propose to keep anyone from testifying, and if it is necessary we will have night sessions to-morrow and Wednesday.

The CHAIRMAN. Yes. I was just going to say, as far as I am concerned, that in order to accommodate as many as possible I am willing to hold three sessions a day, forenoon, afternoon, and night, to accommodate everybody. I hope you gentlemen will arrange as to whom you want to speak, and divide the time among you.

Senator WORKS. I would like to have it understood that they do not have to continue until midnight Wednesday.

The CHAIRMAN. Oh, certainly.

Senator ROBINSON. No man has to use all of his time, of course.

The CHAIRMAN. You may proceed, Judge Short.

Mr. SHORT. I am very much obliged, Mr. Chairman, for exempting me from the exaction in that respect.

The CHAIRMAN. I do that with the understanding that you would probably conclude to-day, Judge.

Mr. SHORT. I understood the kindly admonition, Mr. Chairman, that accompanied the suggestion. I had concluded, I think, the discussion of section 4, and I desire to proceed rapidly and dispose of these suggestions. This is the termination clause, and, of course, it

is one point about which the debate has hinged a great deal. I only desire, therefore, to point out certain things that seem to me to be of special significance.

There is one matter—and I wish to say that I called this to the attention of Dr. Smith, and I think I should say that he suggested that probably the suggestion was proper and that there would be no objection to changing it, but I call your attention to this:

SEC. 5. That upon not less than three years' notice, which may be issued at any time after three years immediately prior to the expiration of any lease under this act, the United States shall have the right to take over the properties which are dependent, in whole or in part, for their usefulness on the continuance of the lease herein provided for, and which may have been acquired by any lessee acting under the provisions of this act.

That is one proposition that I think, upon putting your mind upon it and understanding its significance, nobody would want in the bill.

It is hoped and believed, I have no doubt, and especially by the department, that if this bill is passed, in whatever form it is passed, that existing companies on the public land will come under it and there will be uniformity. Undoubtedly, if there is a good and workable law, that will be the result, and it should be the result, of course, because what we are trying to get away from is the heterogeneous condition and uncertainties of the law.

As an illustration of why that section would be absolutely fatal to operating under the law, which is that the projects to be taken over are limited to those properties which may have been acquired by the lessee acting under the provisions of this act, take the Pacific Light & Power Corporation—and this is the only individual illustration I shall indulge in—that is operating, so far as reservoirs, dams, and hydroelectric works are concerned, in its main and recent development entirely upon the public land or most of it. They have some incidental ownership, but practically upon the public lands. They were already a going and operating company, furnishing large quantities of power in the southern part of the State. They came to the central portion of the State, and they are developing power at an elevation of 7,000 feet on a stream that would develop without a reservoir practically no power at all. They have already spent, in round figures, I think, about $12,500,000 to $15,000,000 in the construction of dams, works, and transmission lines, and they are increasing a stream that would flow only about 20 cubic feet per second to a capacity somewhat in excess of ten times that amount. On a place where no power project could have been installed at all upon the natural flow they will develop some 200,000 horsepower at an enormous expense. That power is practically all transmitted by one main transmission line to southern California and distributed generally over what we call southern California, south of the Tehachipi. If that property came under this bill, under the express language of the bill, of course these properties would not have been acquired under the lease, and therefore, under the express language of the bill, anybody who took over the lease at the end of 50 years, and the property under it, would not be required to take over any properties except those that had been acquired under the lease, and the consequence is, of course, that the intention must have been to take over all properties that at the time were connected with or depended for

their usefulness upon the hydroelectric plant operated under the lease. Otherwise, of course, it would amount to practical confiscation and destruction of all of the properties dependent upon the hydroelectric power under the lease, and which were not acquired under the lease.

Mr. FINNEY. I will admit that was the intention. Our intention was to put it all in.

Mr. SHORT. You would be obliged to agree that, literally read as it stands, it is confined to property acquired under the lease, and however dependent upon the operation of the hydroelectric plant it might be, there would be no obligation to take it over. The consequence would be that absolutely there would be no use of trying to finance a project that was limited in that way and protected in that way, or not protected or limited at all, so far as properties not acquired under the lease were concerned.

Senator WORKS. There would not only be no obligation to take it over but no authority to take it over?

Mr. SHORT. No. There would be none.

Then there follow the conditions which have been read to the committee in regard to paying the actual cost of lands, rights of way, and water rights, at the then value of other properties, and—

That such reasonable value shall not include or be affected by the value of the franchise or good will or profits to be earned on pending contracts, or any other intangible element.

I shall first call attention to decisions of the Supreme Court of the United States to the effect that this bill, in its direct effect, proposes to fix the rules of eminent domain under which a State or subdivision or authorized agency of the State may take over property. I will call your attention to the authorities. I shall not take the time to read them, but I shall ask to have a brief embodied in the record containing the references to them. They hold that the United States Government may not exercise the powers of eminent domain for anything other than the essential uses of the Government within a State, much less could it fix for the State or the subdivisions of the State the measure of eminent domain.

Of course we are inclined always to look at the thing from one point of view: in other words, that it is to help the State and limit the investor. But I call your attention to the fact that the rigidity of this bill is such—it is not sufficiently rigid in a good many other respects, but it is certainly rigid in this—that the properties shall be taken over thus and so at the end of the lease—that is to say, the lands, rights of way, and water rights—at the actual cost and the other property at its then value. Suppose it might turn out—we do not know; the world is pretty well upset at present, and we do not know whether we are standing on our feet or on our heads—that these lands, water rights, and rights of way were worth 50 per cent of what they cost. This bill says, in so many words, that the State itself, if it takes this property over, shall pay at their actual cost; which shows to my mind the absurdity of undertaking to fix within a State, or anywhere else for that matter, the measure of eminent domain 50 years from now. The words are very explicit that these properties shall be taken over at actual cost. It will be said, of course, that the probabilities are that the properties will be worth more at the expiration of 50 years than they are now; but we have

to look in both directions. The law compels us to do that. And if it be worth less, the State is just as much attempted to be bound to pay what it cost, even if it is more than it is worth, as the corporation is attempted to be bound to turn it over to the State at cost if it is worth double or any other amount above the cost.

Therefore, I undertake to say that no man on this committee would be of the opinion that if in granting certain rights for essential use within a State, not referring to property granted or leased, but to general property acquired under the laws of the State, that the Federal Government in connection with granting such a lease could fix the price at which the State might acquire property within its jurisdiction, regardless of its laws and the applicability of the Constitution, at more or less than the fair value or other estimate placed upon property by the operation of the laws of the State. I submit that the whole effort for the United States to say, within any State, that in the taking over of property, which is one of the highest attributes of sovereignty, the exercise of the power of eminent domain; that within certain States of this Nation certain rules shall prevail, regardless of the laws of the States, while in all the other States the rules of the States shall apply, and that this shall apply to particular property will not commend itself to the members of this committee after thoughtful consideration. I am willing to give it as my opinion as an attorney that any of the good lawyers on this committee who have examined the subject will say that the whole effort to state in this bill the rules of eminent domain that shall apply to a particular class of property, and not acquired under the bill, is absurd, abortive, and of no effect, and if passed would simply have the effect of hindering and limiting the development of the industry, and could not possibly operate at the end of the lease.

I suppose the gentlemen themselves would immediately confess that if by the rules here fixed the State or its authorized agents were compelled to pay more for the property than they would have to pay under the operation of the laws of the States they could not compel them to do that. No more can they compel a citizen of the State or an agency of the State to take less than the properties are worth. In other words, they can not fix the measure of eminent domain.

I hazard the suggestion that after studying it over and thinking it over carefully you would not want to undertake to do that, except, as I suggested this morning, that with respect to the properties here granted the rights acquired under the bill can not be capitalized, but that they will be as security held as the balance of the investment in financing of the properties.

I desire to say very briefly, in regard to the issue here sought to be established—I am now speaking of what the authorities and the Interstate Commerce Commission and the commissions of the various States have very well settled—in the development of a business, and addressing your attention to the portion of the bill which provides that nothing intangible shall be included; of course, it is doubtless true that no unreal value should be included, but I assure you that some intangible things are just as real as tangible if you put your money into them. The record of the development of these and other industries will show that it is a very exceptionally organized and developed business of this character that could show tangible assets of 75 per cent of the money necessarily invested in the development

of that business. The commissions recognize that. They have allowed, I think, all the way from 25 per cent to 50 per cent for money necessarily expended in the establishment of that business that was not invested in tangible property. They do not allow that money to be returned, but they allow you to run, for instance, if you have put your capital into great enterprises that take 10 years, for instance, to commence to earn—and a good many of these will take more—upon the total investment; that money is forced to be idle, and the commissions recognize that; you can not take and earn from a few consumers, during the development of the property, the interest on $15,000,000 that is not yet working, and which can not be at work, but must be developed coherently and can not work until the population comes in. There is a large element for idle capital allowed.

That is all recognized by the commissions, however, as a part of the essential development. I know that is so in California. They do not allow you to get that money back, but you earn on it as a capital investment. So that if, under these rules, you provide that no intangibles should be included, from 25 to 50 per cent of these properties under the operation of this law would be confiscated at the end of 50 years, because you must earn on the capital, but you can not acquire it back, and it provides that at the end no intangibles shall be taken over. I undertake to suggest that under the operation of such a bill as that, which absolutely cuts under and takes away what is allowed by the operation of the laws of the United States and of the several States with respect to other properties, these properties would be bound up with prohibitions that would operate against financing and development.

This clause of section 6 I do not intend to dwell upon, but I believe it has been suggested, and probably it is the idea of the gentlemen supporting the measure that it shall be amended. The operator has no preferential rights, there is no deference paid at all to the undoubted right of the State to indicate who shall succeed or continue in a public service; none at all. There is no preference to the person operating the property.

I assure you that I think some of these properties will be growing at the end of 50 years from now. I have been interested as the legal adviser of developments that have been going on for 10 or 15 years, and that are just barely started and do not deliver as yet more than one-fifth of the power that should be produced. The result would be that the Government would be under no obligation to lease to the original lessee. It would be under no obligation to give him any preference. It would be under no obligation to defer to the right of the State in indicating that he should be given any preference, or that he should be compelled to continue the public service, or as to who shall succeed to the public service, but it simply provides, arbitrarily, that upon three years' notice, although the termination does not occur before the end of the 50 years, the Government or somebody else may take this property over upon certain terms which, I submit, are impossible, and therefore this property would be operated under the continuing apprehension that within three years after fifty years it might be taken over at any time.

Let me point out here what I regard as a vitally important consideration. As Secretary Fisher explained, they have operated as they chose, and I believe with some success, in the matter of adjusting the Chicago franchise for their street railroads. The States are operating in various ways. The municipalities are operating in various ways, and the franchises are within the control of the authority that controls the continuation, limits the operation, and has the say as to the expiration of the right which, of course, in one way or another, is of indefinite and practically perpetual continuance.

I now invite any gentleman supporting this bill in its present form to show me any provision in any law whereby any authority except the one that grants the franchise and directs the use and has the legal responsibility and the jurisdiction over the people that enjoy it, grants a franchise terminable at a certain date or during which they undertake to control the industry.

The fatal mistake is in assuming that the Government, which is the owner of the lands, controls the business, controls the industry, grants the franchise, and fixes the life, fixes the termination, the earnings, conducts the business of the corporation, when, as a matter of fact, it does not and can not. Nobody has ever come forward and made an argument that the United States could do the things that are essential to be done in connection with the determination of how long a corporation shall live, how it shall be conducted, when it shall expire, and to whom its properties shall go.

Therefore, in undertaking to say that in this instance, because you might own 40 acres of land which might happen to be upon the public land, as to that particular industry the United States is the controller and the manipulator of that business, and controls its life and death, is wholly at variance with the principles of law and government in this country under the Constitution of the United States and the laws of the several States. It is incompatible with sound law, with sound financing, and permanency, and coherency in the prosecution of industries, and is nonexistant anywhere else that I know of anywhere in this world. Certainly it is in the United States, under any law of Congress or of the States.

It is one thing for the United States Government to say how long a corporation shall enjoy a franchise and how it shall conduct its business within its jurisdiction, but when it undertakes to say that and all the other things I have enumerated with respect to matters not within its jurisdiction, but assumed to be within its control, through the mere incidental control of the right of way over its public lands, we are absolutely undertaking to do something that fundamentally can not be done, in my judgment, that ought not to be attempted to be done, because it will only result in reaction and injustice on both the Government and the people.

I think what I have said covers the main suggestion, and I will not go into detail, because that has been partially covered by others as to the remainder of that section.

Section 7 provides:

That where, in the judgment of the Secretary of the Interior, the public interest requires or justifies the execution by any lessee of contracts for the sale and delivery of electrical energy for periods extending beyond the life of the lease, but for not more than twenty years thereafter, such contracts may be entered into upon the approval of the said Secretary, and thereafter, in the

event of the exercise by the United States of the option to take over the plant in the manner provided in sections five or six hereof, the United States or its new lessee shall assume and fulfill all such contracts entered into by the first lessee.

That whole provision is simply intended to cover the assumption that these corporations can enter into contracts that will interfere with the exercise of the right by the United States or by a State to regulate rates.

It is perfectly well settled in numerous decisions of the Supreme Court of the United States—for intance, in one case decided about a year ago—where passes had been granted for the life of certain persons injured on railroads, and were lawful at the time, and when the law against passes came into effect the United States Supreme Court was asked to pass upon whether those laws interfered with those passes or not, whether the passes interfered with the regulation or not, and they decided that they did not and became invalid when the law prohibiting passes was passed.

All contracts, of course, that affect the public service are subject to the regulative laws of Congress in proper cases, and the regulative laws of the State in all other cases. If it were not so and if the United States desired to pass a law, it ought to pass a law that would apply uniformly to all similarly situated corporations and provide like regulation of all of the related industries, and not single out these industries and say that these incidental ones that are upon the public lands can not make contracts that it is assumed others can make.

Suppose I concede the position of the gentlemen, and suppose, except for this law, such contracts could be made, and they would be lawful and enforcible. Do you suppose, if that could be done, and if these industries that are incidentally operating on public lands could be prohibited from making contracts that others could make, they could compete successfully with them? Certainly not. The answer is that all should be subject to the same regulations. But if they were not, and this bill were necessary to prevent hurtful contracts, then, if all others could go to a man and say, "I will give you a contract good for 20 years, or 30 years or 40 years or 50 years," and the other people could not, the fellow that could not would have to throw up his hands. That is all there is about it. We must have the operation of equal laws, equally operating as to all related industries. Otherwise there can be no successful financing or successful competition between those industries.

If it is a good law, if it is needed—I do not think it is, at all—but if it is, it should apply just as much to industries not operating on public lands as to those that are.

I have already, perhaps, said almost sufficient upon section 8, which provides for the fixing of the rent or the charge, as it is put in the lease:

The Secretary of the Interior is authorized to specify in the lease and to collect charges or rentals for all power developed and sold or used by the lessee for any purpose other than the operation of the plant, and the proceeds shall be paid into, reserved, etc.

Just parenthetically I will observe that I am not worrying very much about where the proceeds shall be paid, because it would be like the case of the boy eating the apple. I don't think there is

...e, however, I think this
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...estion—and I want to make it as clear
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...n to this effect, but since 1901 we have
... 1901. The act of 1901 refers to per-
... ls under rules and regulations made by
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...ment right—I am not trying to quote the

... somewhat familiar to every member of
... legislation equivalent to the Ferris bill has
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... perhaps for the convenient reference of
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... by Dr. Smith of the rules and regula-
... the Interior under an act that does not
... of any charge except it is claimed, of
... That does not authorize the enactment of
... anything else for the government of any
..., for the protection and duration of loca-
... the public lands. With no word from Con-
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..., with no word from Congress about the con-
... have already been enacted by the depart-
... and regulations and orders equivalent to
... that is contained in the Ferris bill.

That, therefore, brings me to this suggestion: That if there is no objection I would like to have that form of permit here included for the reference of the committee. But if it is thought that it is sufficiently available so that that is not necessary, just leave it out.

The CHAIRMAN. It is in the House hearings, is it not?

Dr. SMITH. Yes.

Mr. SHORT. If that is so, I suppose it is not necessary to reprint it here. I think I have sufficiently called it to your attention. I have done that to bring you to this suggestion: These gentlemen here who are representing the Government and the public interest, or who are endeavoring to do so, are just as much interested in a workable constitutional and fundamentally correct bill as any of us can be. Of course, it will be to the discredit of all of us and to the United States if any unconstitutional, illogical, and unworkable bill is passed whereby controversies and confusion and undesirable policy shall be established and whereby developments shall be hindered.

I simply submit to you, then, this consideration, and I think it is the most important thing that I propose to say: That the elimination of every affirmatively bad feature from this bill will not make a good bill out of it at all or anything of any value to the States or to the investor, because under the form of the bill they may lease or not; they may lease for 50 years or no years; they may charge much or little; in other words, they may suspend, limit, or so load the lease with rules and regulations that it can not be exercised or enjoyed and so that investors will not take it.

In other words, it is an affirmative grant of powers to do everything by rules and regulations that has already been put in the bill, and a great deal more, and gives the sanction and approval of Congress to that sort of procedure.

I therefore urge upon the committee as strongly as I can that if constructive legislation is adopted it must be specific, it must be written in the law, and the rules and regulations of the department must be confined to those rules and regulations which will carry out the law, and not extend or suspend the law. I think it will be agreed that those ideas are fundamentally right. They are the ideas upon which the courts usually proceed, and they are the ideas that should control, and unless we have a specific bill, with specifically definite rights, with specific and definite rentals—in other words, devoid of any provisions under and in connection with which the rules and regulations such as proposed by these gentlemen can be made. It may be that these gentlemen will not adopt them. I am still exceedingly young, but I have seen a procession of these wise men come along, and I have seen permits and regulations issued, and I have seen them revoked wholesale. Every company I have represented has been left hanging by its eyebrows without a permit at all until another one came along in an entirely different form.

Senator CLARK. I want to call your attention right there to what Mr. Fisher said in his testimony before the House committee, that so far as he knows, in regard to certain permits, these revocable permits, in none of them had the power of revocation been exercised by the Interior Department.

Mr. SHORT. Of course I did not realize that Mr. Fisher had made a statement of that kind. If he did, he was mistaken, because Secretary Garfield revoked 25 by one order.

Senator CLARK. I simply referred to Mr. Fisher's statement, which is here.

Mr. SHORT. Every company that I represented had its permit revoked. I am talking about that.

Senator CLARK. Here is Mr. Fisher's statement. He says:

He [the applicant] need not fear in regard to this power of revocation being put in the Secretary, that it would be arbitrarily used. He knows that no Secretary of the Interior would exercise that power arbitrarily, and this results merely in foisting on the public a heavier carrying charge than would be fixed if that revocable provision were not in the permit. So far as we know there has never been an attempt to exercise that power of revocation.

Mr. SHORT. Dr. Smith called my attention to the fact that the list of those revoked is contained in the report of the House committee. It is quite a long list. Not only were the permits referred to in that list revoked, but there have been a great many other revocations or rulings equivalent to revocation.

I realize that it will be stated, and it ought to be stated, that an initial duration—and to a certain extent there is an effort in this bill to give a tenure, and that after you have once got a lease you have a certain property up to the expiration of the lease, in some respects a sufficient tenure—yet we ought to understand this, that, as I say, these leases and the water rights require concurrent development sufficient to hold good the water right.

Back of this Pacific Light & Power Corporation reservoir is one of the finest streams of the United States, and sites for three or four other reservoirs, and there could be developed and turned into what has developed a little less than 200,000 horsepower enough to develop between 400,000 and 600,000 horsepower—a magnificent proposition, but an enormously expensive one. All of that water falls, when all the power plants are in, 5,400 feet under pressure to the main river, and a thousand feet below that, nearly. So that you see we have some elevations out there as well as distances. We might have a lease for the Big Creek, but we could not take a lease on, and probably nobody else could use the waters back of Big Creek; and we want to know, if they are not occupied and used by others, that if we want those others we shall know whether we can get them or not. We do not know what the law is or what the rent will be or what will be written into the laws or the lease.

Here I call attention to another section--that the rules and regulations are not, as prescribed in this act, to carry the act into effect, as is usual, but rules and regulations not inconsistent with the act.

My friends, can you realize the nature of the license that Congress is extending to a man, or rather a procession of men, when it only suggests two or three things in this bill at all and then says all the infinity of things that can be done may be done, except they shall not be inconsistent with these two or three things? Do you think that anybody would feel secure in a great investment upon which it could not commence to earn a fair return for 10 or 15 years, to enter upon public domain in competition with another similar industry that had its rights fixed and clearly understood and had almost an equivalent source of power and energy, and about the same costs—do you think they would do it? I do not. And I believe that the passage of anything resembling this bill would be a calamity

and therefore, notwithstanding my great respect for these gentlemen and my desire to act in accord with them always—and I would not change them or substitute anybody else for them if I could—nevertheless it is my duty and that of every man understanding this subject and who has studied it as I have to address this committee and to give the committee the benefit of his judgment honestly, for whatever that may be worth, and to state what he believes to be the fatal and fundamental objections to this whole act.

I desire to say that I do not believe it will ever come about that the United States of America will or can couple the functions of municipal or civil government with the granting of rights over the public lands and grant satisfactory and successful rights of way and exercise civil government in the same connection. I challenge anybody to state how it could be done just because incidental industries are incidentally located on the public lands, with no power of the Government over connected or adjacent or competing industries.

There is one other point I want to make right there: Secretary Fisher, who is a very brilliant man, certainly, and who has certainly presented this matter very capably, said, "If this charge, whatever it may be, does not come out of the power companies, why do they object to it?" Well, gentlemen, that ought to be simple. Of course in all ordinary instances the rates are regulated in such a way that whatever the power company pays under its lease is a part of the expenses that go into the rates that the public pays. Senator Works is so familiar with that that he could elaborate it to you much better than I could, and it is not necessary for me to speak about it. Do you not realize, however, that out in California, for instance, we have in conjunction the opportunity for the finest and greatest development of power, with market, that there is anywhere, perhaps; but side by side with that we have the development of oil which may last 15 or 20 years, or 50 or 60 years, exceedingly abundant, of the quality for fuel, and very cheap. So that, while we have an abundance of successfully developed water power, we are face to face with competition that may any day go under the fair cost that will be allowed us by the railroad commission. When that is so, the gentlemen here who have suggested that it may be that one power product will cost $200 for installation and another $150, and maybe there are some that would not cost over $100——

Senator CLARK. Per horsepower?

Mr. SHORT. Per horsepower, yes; that if the Secretary was not authorized to collect the rent sufficient to equalize the difference between what one company could earn and what the other company could earn, the people could not get it—I do not put my hand in my pocket to see whether I would get that or not, for several reasons. In the first place, if one cost $200 and another cost $100 and the difference was met, the $100, in other words, charged in the rent, there would be $6 per horsepower per year rent to equalize the 6 per cent that the one would run over the other. That would probably enable the United States Government, when these powers were thoroughly developed, to repeal the income tax laws, because it would provide about that amount if it were applied largely enough. I undertake to say, however, that any lawyer that would go before the Board of Railroad Commissioners of the State of California and argue

that he admitted that his installation had cost him $100 for each horsepower and that another had cost somebody else $200, and that he should be allowed to earn 6 per cent on $200, would be disbarred or disqualified from presenting cases before that commission again, because they fix it, as every man should know, upon the cost of the development of the project with relation to the corporation having its rates regulated—and the devil take the hindmost.

If coal in California still cost ten or fifteen dollars a ton and there was no oil and there was no development of power other than hydroelectric except by coal, is anybody crazy enough to suppose that the Railroad Commission of the State of California would allow power companies that were able to furnish power in competition with coal at $2.50 or $3 a ton to run up to eight or ten or twelve dollars a ton? No; there is absolutely nothing in it at all. There is no merit in the proposition. No company can complain as long as it gets earnings on its honest investment as measured by the governing authority and upon its obsolescence and depreciation and necessary cost of operation. That is all there is to it.

The very fact that the Secretary has this idea that he ought to charge enough to equalize the cost so that the good project would be just as bad as the bad one—that is what it amounts to, don't you see—the very fact that he has this idea would be sufficient ground for these people who are developing these industries and the people who are to be served to avoid coming in contact with an idea like that; because it would cost them a great many million dollars, because this would regulate the service up, not down; it would regulate the cost consistent with the expensive, not the inexpensive, plants. I undertake to say if you will examine that subject you will eliminate all such ideas. The two arguments against the charge are:

First, if these people make these developments they must be able to anticipate and meet any competition from coal or oil or other development of power, and if they are charged heavily they can not do that. Therefore they are interested in keeping the charges down. Primarily and fundamentally, however, the people of every State and the regulative boards are interested in keeping these rates down, and will be obliged to pay, in the end, except in instances of exceptionally cheap fuel, whatever charge is imposed by the Federal Government on these uses.

There is another clause that I want to call to the attention of the committee:

> That leases for the development of power by municipal corporations solely for municipal use shall be issued without rental charge, and that leases for the development of power not in excess of 25 horsepower may be issued to individuals or associations for domestic, mining, or irrigation use without such charge.

Let me suggest two or three things in regard to that. It is an important clause.

If it is issued to a municipal corporation solely for municipal use, I would not know whether, if a city were engaged in the municipal business of supplying its inhabitants with water or power, that would be a municipal use or not. I presume it would. At any rate, however, we must assume that it provides for discrimination. There are several reasons why that should not be allowed. This is not a

charge for the use of the land by the Government, but upon the right to enjoy the proceeds of industry over that land and a tax upon the development of the power. Therefore you will have in mind, in considering this, that the Supreme Court of the United States has several times decided, and applied it to South Carolina in the liquor cases, that where a State or municipality was engaged in the business of supplying its inhabitants with water or liquor—in South Carolina it happened to be liquor—that it was to be treated and taxed like any other corporation engaged in that business; in other words, it was not carrying on a recognized function of government. Therefore this bill would provide that this excise charge that the Constitution of the United States says shall be uniformly levied shall not be uniformly levied, because it says that they shall not be charged anything for these municipal uses.

It also says that there shall be no charge in the case of leases for the development of power not in excess of 25 horsepower.

It may be suggested that that is upon the theory that the exemption is beneficial and that the charge will be large enough so that it is a good thing for somebody to be left out from under it. Otherwise it would not be there. It is something you want to get away from. I agree with that. That is one thing I am trying to get away from. All of us will be, I think, before we get through with it.

Therefore this would provide that—suppose Sacramento, Cal., was engaged in regulating the supplying of power to its inhabitants by a corporation operating under a lease, it would pay a tax which would come out of the consumers in Sacramento, while if Fresno, where I happen to live, had a municipally-owned plant and operated it wholly for municipal purposes, it would not pay the same charge that the people of Sacramento pay. Where can be found the reason for such a distinction?

It may be suggested, and I think the gentlemen themselves would agree that if there were any preferences or exceptions in this they should apply to all public service alike; because the powers of eminent domain run to public service, and the right of regulation runs to public service, and in this instance the cost is added to the bill that the people pay, and therefore there should be no discrimination between any companies operating a public service. I do not believe that there should be any at all. Clearly there should be none. I do not believe, to be frank, that there can be any discrimination under the law. In any event, I do not think there should be any.

I will add this further reason, and I ask you gentlemen to consider this: Suppose that the city of Sacramento, that I referred to, is using power generated by water for municipal purposes, and as they are doing to a large extent, some farming lands on the west side of the Sacramento Valley are using, or desire to use, an equivalent amount of water to pump water for irrigation, the Secretary of the Interior shall exempt the municipality and shall impose some rental upon the farming community enjoying the same rights from the Federal Government? I see no reason why there should be written in any law a provision that the man in town shall not pay, for equivalent service, the same as the man that lives on the farm; and that discrimination is in this bill.

Senator NORRIS. I would like to ask a question in connection with what you mentioned a few moments ago about the decision of the

Supreme Court in connection with the South Carolina liquor business. It seems to me that there is a distinction here, or that the point is worth considering whether there should be one or not, for the sake of this argument, taking the bare proposition of the Government's right to discriminate in favor of a municipality. As I understand, it is based on the theory that the Government owns the land on which it is necessary to develop the power. Would it not be perfectly constitutional for the Government, through an act of Congress, if it wanted to, to lease this particular land to an individual, we will say, without charging him anything, and if there were half a dozen individuals who wanted it to give it to one? There would be no constitutional inhibition, would there, because it is the use of Government property upon which the right to levy this tax is based, and the Government could, therefore, give it to an individual and discriminate against another individual if it wanted to.

Mr. SHORT. But, Senator, in the clause where the public lands were granted by the States to the Federal Government, that clause in the Constitution, it says that this shall not operate to the prejudice of any particular State, and therefore if the United States undertakes to exact a charge that is not measured by the value of the land, but upon the industry developed on the land, it does operate to the prejudice of that State. You would have to agree to that.

Senator NORRIS. The Government, if it wanted to, as it has practically to a great extent in the past, could refuse to let anybody use this land and absolutely prohibit the development of a particular locality if it wanted to.

I do not understand why the Government, as long as it could do that, would be subject to that legal inhibition that says, in the South Carolina case, that if the State went into the whisky business it is subject to the same laws that apply to anybody else. Here the Government is leasing some of its own property, and I take it that it could lease it to anybody or not as it pleased. It could lease it to John Smith and let Sam Jones stay out in the cold, even though he was just as much entitled to it as the other fellow.

Mr. SHORT. Let me suggest this, Senator: I am going to submit to you a brief containing quotations from decisions of the Supreme Court of the United States. You will understand the reason I do not agree when you read that, that it is absolutely optional with the United States whether the State shall build a road to the State capital, or the railroad through the State, or a transmission line or develop its waters or not. I do not think if it ever comes to the point where the Federal Government undertakes to assert that it could fix it so that the governor of the State could not go to the capital on a road, and if it could do the one it could do the other. I do not think it could do anything of the kind; and when you read these decisions that are quoted in my brief, I think you will agree with me.

Senator NORRIS. Your legal proposition is that when the Government leases these lands it has to lease them to everybody alike; that it can not discriminate as it does undertake to do in the bill?

Mr. SHORT. I am not undertaking to discuss that question, Senator, but the precise question raised in this bill- confining it strictly to that: That when it undertakes to say that a tax upon the developed industry shall be the condition, that, of course, the United

States Government could not repeal the equality of right and taxation in those States only where it has public lands and as to the industries operating on those lands; and if it undertakes to measure its charge by the industry, it is levying an excise tax and can not get away from it and getting enormous revenues as the result of doing it.

This bill could be operated so that the Government would get $100,000,000 under it and not upon the use of its lands, but upon the enjoyment of the industry in a State, and by levying excise taxes on products of that industry which the Constitution of the United States says must be uniform.

Do any of us believe that the Supreme Court of the United States would allow the United States Government, if it was willing to use the public lands as a subterfuge, to say, for instance, that if you ship freight over a railroad on public lands you should pay so much a ton on the freight going over them, which is the same as if you developed power and run it over public lands; that you shall pay such a percentage if you do that? I have to hurry through, you understand, so that I do not take up time to discuss that more at length.

I have very carefully prepared the decisions of the Supreme Court of the United States up to a certain date applying to this question, and I shall be glad to hand a copy of it to you and ask to have it put in the record.

Senator NORRIS. I shall be very glad to examine it, for my part.

Mr. SHORT. It is really very interesting. You understand some of these questions came up in the early history of the country, along about the time that Webster and Hayne had their famous debates in Congress over these public-land questions, and a little before that. And from that time on the United States Government became so liberal and so acquiescent and so generous in the use of the public lands, not exacting even the compensation that it could exact, not requiring any unreasonable conditions, and sometimes not even reasonable conditions for their use and enjoyment, and the development of waters, the building of roads and railroads, the construction of telephone and telegraph lines, and so on, that nobody had a chance to raise any constitutional question against the United States, because it was such a liberal trustee and recognized the rights of everybody, so that nobody could raise a question. It is only just now that some of these cases will be reaching the Supreme Court, as fast as they can, in order to have these questions finally determined, with reference to the points I have been discussing, perhaps not so much the governmental features of this bill but the features Senator Norris's question leads to.

First, I wish briefly and very succinctly, if I can, to refer to section 9 of the bill, wherein it is provided:

> That in case of the development, generation, transmission, or use of power or energy under a lease given under this act in a State which has not provided a commission or other authority having power to regulate rates and service of electrical energy and the issuance of stock and bonds by public-utility corporations engaged in power development, transmission, and distribution, the control of service and of charges for service to consumers and stock and bond issues shall be vested in the Secretary of the Interior or committed to such body as may be authorized by Federal statute until such time as the State shall provide a commission or other authority for such regulation and control.

I do not speak as a power corporation attorney in this instance, because the corporations that I am so fortunate or so unfortunate

as to represent, as the case may be, are in a State that regulates everything up to the handle, and perhaps a little beyond. Therefore I speak now as a citizen of the United States. I simply want to remind you gentlemen that the Senate of the United States is a great constitutional body, two from each State, no matter how big or how little, populous or thinly populated, because the founders of this Government believed that from time to time there should be representatives of the States. What I submit is that there is no foundation in constitutional law for the idea that merely because a State does not exercise its powers of government, wholly pertaining to its own necessities—and this does not apply to any interstate commerce or anything delegated to the Federal Government—that the Federal Government can go in there and do anything that it can not do in any other State. In other words, it is settled, if anything is settled in this Government, that the powers of the Federal Government rest upon the powers that are conveyed to it by the Constitution, and not upon any mere inaction of the States. Now, gentlemen, you understand this is a precedent. This is an undertaking to say that if a State does not pass certain laws, which I think they should pass, and I presume they will pass, that the United States Government, solely for that reason, may go into that State and legislate and control the people and the industries in that State. I shall not take up the time of this body in indicating the enormous precedents that might be established. If the State did not pass adequate laws for the protection of titles, if the State did not pass adequate laws for the protection of the right of common attendance at the schools or for the right of carrying on or voting at elections, for the right of doing anything else that it was thought that it ought to do, that the United States Government could invade that State, when it could not invade a State that had passed laws making such provision, laws satisfactory to the United States, and exercise its functions, that the United States could go into a State and exercise those functions that it could not exercise in another State.

That section of the bill will not affect me or any man I represent before this body, but there is an old saying, "Do unto others as you would that others would do unto you." And do not imagine that you can pass laws that the Western States may or may not do certain things, and if they do not you will do certain things, or, as the Supreme Court of the United States said in one of its important decisions, "impose your opinions upon that State," that it will not be a precedent that will be asserted over and over again in this country and in this Congress, that we can go into a State and do these things because it is not doing them for old people or young people, or children, or pertaining to elections, or schools, or whatever it may be.

I say that it is for the common interest of every citizen of the United States that everything in this bill that is a denial of common right or the assertion of exceptional jurisdiction either within a State or over a citizen of the United States should go out of that bill, because it is a bad precedent, and should not be in there, for fundamental constitutional reasons, although it does not apply to the people that I speak for here.

Senator NORRIS. If you take that out you would leave the matter absolutely unregulated, would you not, when it was carried into such a State?

Mr. SHORT. Absolutely not.

Senator NORRIS. What would apply in that case, where the State has no law regulating it. You do not want us to regulate it.

Mr. SHORT. You understand, Senator, if right over there in the same school district there is a power plant running with oil or coal, and not on the public lands, nobody pretends that you can regulate the rates of that company, because the State is not doing it.

Senator NORRIS. I understand that. But what would be the regulation—suppose it was passed with that out, as you want it?

Mr. SHORT. Yes.

Senator NORRIS. What would be the body, if any, and what the regulation, if any, in that event?

Mr. SHORT. There would be those institutions under the laws of the State and of the United States, all of the regulation that is visited upon related industries not upon the public lands. You understand these companies can not compete with each other in most instances. The competition is incidental. Sometimes they do Largely they do not, because you can only send your power as far as your lines go. Who would say that a hydroelectric plant that was a great deal more desirable in the public interest, operating in the same jurisdiction, should be regulated by the Secretary of the Interior, when another power company operating equally cheaply and in competition with it in the same jurisdiction should not be regulated at all, because it is not pretended that the rates of this other company are going to be regulated.

Does the Congress of the United States want to regulate an incidental power company in an incidental State upon an incidental piece of public land, and allow identical industries in the State and all the other States not to be regulated? I undertake to say that you could not defend that at all.

If there is one thing we do not need to worry about, it is that the people of the several States are not now thoroughly alive to their interests, to regulate their own business, to regulate their own industries and rights. It was suggested that if they did not, then if the Secretary of the Interior did, why, the States might do it. I do not know. I do not know why they should, if they have a cheerful and convenient guardian to do what they are not doing themselves; I do not know why they should get busy, unless he regulated the rates higher than they thought they ought to be, and then they would assert their sovereign powers and lower them.

Senator NORRIS. They would have a right to do it. They would have a right to assert their sovereign power and do it. You do not want us to regulate it. Would not that leave it unregulated unless there should be some competition there?

Mr. SHORT. You are referring to States where there is no regulation of rates?

Senator NORRIS. Yes.

Mr. SHORT. We will talk about rates and make it brief.

Senator NORRIS. Yes.

Mr. SHORT. If this was not contained in the law none of the power companies in that State would be regulated, you understand.

Senator NORRIS. Yes.

Mr. SHORT. Because the people of the State did not want to regulate them. They have the power. Nobody contests that.

Senator CLARK. If it is intrastate business.

Mr. SHORT. I am talking about intrastate business. That is what we are talking about here. Nobody is arguing about the regulation of interstate commerce. We do that under the Constitution.

To get the point clear: If this law passes, assuming its constitutionality, which I do not think exists, but assuming that, then in a State the industry that happened to be on the public land would be regulated by the Secretary of the Interior, but no other industry of the State would be regulated until the people of the State got ready to regulate it themselves.

Senator NORRIS. That is right.

Mr. SHORT. Yes. Therefore, what I submit is this: That inaction on the part of the State is a right. You have a right to pass laws in your State that I think are supremely foolish. I have a right to do it in my State, and you have a right to do it in your State. But you have a right in Nebraska to refrain from passing laws upon any number of subjects that do not relate to the powers of the United States, and that is your right.

Senator NORRIS. But this does not contravene that at all.

Mr. SHORT. Absolutely.

Senator NORRIS. No. This bill says, "When the State does not regulate it we will."

Mr. SHORT. Yes.

Senator NORRIS. This particular power generated is on the public land. If you are in favor of regulation, as I take it you are——

Mr. SHORT. Yes.

Senator NORRIS. What is the objection to that?

Mr. SHORT. I am in favor of regulation that applies to all related industries alike; but I am not in favor of regulation that puts one company that shall be developed on the public lands under a restriction that does not exist with respect to another identical company in the same State.

Senator NORRIS. You think, then, because a State does not regulate its public utilities, that if on public land we develop some public utility we ought not to regulate that?

Mr. SHORT. What I say is, that you should do this: You either have the power or you have not got it. If you have the power to regulate corporations wholly within the State, you should take in others similarly situated, and regulate all industries in that State in that business.

Senator NORRIS. No one is claiming that the Federal Government has the right to regulate a company in the State not on public land.

Mr. SHORT. No.

Senator NORRIS. The only reason it has it under this bill, if it has it at all, is that it is on land owned by the Government.

Mr. SHORT. I do not think anybody here has claimed that the United States Government can make a bargain with a power company under which bargain it can exercise powers within the State that it could not exercise under the Constitution of the United States; and that is what this is—a bargain with the company that it will take a lease so that the United States Government shall exercise

and handle the power of government in that State under contract. That would be a wonderful and delightful illusion, would it not? That the United States Government, by bargains—and if it could do that in this case I don't know why it could not be applied to other things—could exercise powers within the State.

I will not discuss that further. The Supreme Court puts that out of argument in their decisions.

Senator WORKS. The great trouble about this is that you would have one industry in the State regulated and the others without regulation entirely?

Mr. SHORT. Yes.

Senator CLARK. And the same sort of industry?

Mr. SHORT. The same sort of industry, and in competition with each other, probably, and based solely upon the fact that the Government has rented some land to one of them—which, to my mind, is absurd.

Mr. SHORT. I now come to section 10, gentlemen. I am getting pretty well through with the review of this bill, I am very happy to say. Section 10 is in regard to the disposition of the lands upon which these properties are located. Of course, from the view of any of us all that the irrigation companies or the power companies or other water-using companies want is the right of way effectually and permanently established, running with the water right and with the duty to use it. If the land can be disposed of subject to those uses of the water, or any value for any other purposes, they should be disposed of. The only clause I want to call attention to in that section is near the end, therefore. It says:

That locations, entries, selections, or filings heretofore allowed for lands reserved as water-power sites or in connection with water-power development or electrical transmissions may proceed to approval or patent under the subject to the limitations and conditions in this section contained, but nothing herein shall be construed to deny or abridge rights now granted by law to those seeking to use the public lands for purposes of irrigation or mining alone.

That would seem to carry the implication, at least, that irrigation and mining alone are only to be protected, and that if you are developing power, even though power was used to pump water for irrigation, still you would not be protected.

Of course there is in the repealing clause another section that says that vested rights in water, etc., are to be protected; but that clause should go out and the other clause should remain in, so that there would be no statement there that if an irrigation company used water for irrigation and power its rights were not protected, while if it was wholly a mining or wholly an irrigation company they may be reserved, but it has to be for one or the other alone. I do not know why that was put in there, but of course the general clause in the other section reserving all vested rights is what should be used.

Mr. FINNEY. It was put in in the House of Representatives.

Mr. SHORT. Yes. It is not necessary, I think, Mr. Finney, and it might be misleading.

I think section 11 requires no separate comment from me. It provides:

That the Secretary of the Interior is hereby authorized to examine books and accounts of lessees and to require them to submit statements, representations, or reports, including information as to cost of water rights, lands, ear

ments, and other property acquired; production, use, distribution, and sale of energy; all of which statements, representations, or reports so required shall be upon oath, unless otherwise specified, and in such form and upon such blanks as the Secretary of the Interior shall require. And any person making any false statement, representation, or report under oath shall be subject to punishment as for perjury.

Of course, that neither stays in or goes out with the municipal feature of this bill.

I suppose if you are going to take over the functions of the State and exercise municipal authority under this bill, you will require all those things, which will cost a lot of time and money. Under the regulation of rates the consumer will have to come in again and put up a little more. It would not be one big item, but they would have to have all of these things that I enumerated there, I suppose, if they are going to regulate rates and municipal government. If they are not, that section goes out, of course.

Now, section 12, in regard to the forfeiture of the lease, provides:

That any such lease may be forfeited and canceled by appropriate proceedings in a court of competent jurisdiction whenever the lessee, after reasonable notice in writing, as prescribed in the lease, shall fail to comply with the terms of this act or with such conditions not inconsistent herewith as may be specifically recited in the lease.

That is a broad license to the present or any future Secretary of the Interior to write anything that human ingenuity can invent into a lease that is not contrary to the law; and there is precious little in this law that is required to be put in, just two or three things. Otherwise he can put in everything that he thinks ought to be put in there for any reason. If you read these late permits and regulations you will realize that there has been a great deal of ingenuity developed in finding things that should be put in to regulate these western folks. Then, if he does not comply with any one of these things that the Secretary of the Interior puts in, his lease can be forfeited.

Senator NORRIS. That is the kind of provisions that they put in here when I rent a house, applying to me. I think that they are common in any lease of property.

Mr. SHORT. But you do not have to take the lease.

Senator NORRIS. Neither does the power company.

Mr. SHORT. Is the State to forego the right to develop its natural resources?

Senator NORRIS. Is the house to remain vacant? Nobody has to occupy it or to take it. They always say that.

Mr. SHORT. The owner of the house is not the Government; and there are other houses.

Senator NORRIS. Exactly; and there are other companies. If they can not reach an agreement there will not be any.

Mr. SHORT. Yes; but the United States Government may own a piece of 40 acres of land, and on that land could develop an industry worth millions of dollars to the people of the State; and yet you authorize the Secretary of the Interior to put in anything he thinks should go in regardless of the will of Congress. I do not believe you would want the United States Government to be in the position of saying that the people of a State must wait upon the Secretary of the Interior until he gives them such conditions that they can develop their industry. It has not been the policy of the United States.

It is not a fair policy nor an equal policy, and it should not be adopted.

Senator NORRIS. I do not think it is fair to say that it would be the policy of the Secretary to put in something that was impossible.

Mr. SHORT. Do not misunderstand me, Senator. What I say is that we put it into his power.

Senator NORRIS. Exactly.

Mr. SHORT. My general idea is—I do not know what the other people's ideas are—that we should be equal in the different States, and that every citizen of the United States should be on an equality, and that no one man should have any right to say any more about the conduct of our business than he would have to say about any other citizen of the United States or any other State. We may be wrong about that, but that is our idea, that we ought to be under one law and not put under one man, while the rest are not under him at all. We think we should have a law and it should apply to everybody in the same relation in the United States. I believe that is fundamentally right.

Now, section 13, about rules and regulations: As I have stated, as long as the Secretary can grant or refuse a lease of course there is no use to give him power to adopt rules and regulations, because if he can refuse to do a thing he can adopt any rules and regulations as a condition of doing it that he pleases. So that under this law, where he can grant a lease, or he may absolutely refuse, he can adopt any rule or regulation he may please; and if you do not like the rules and regulations which he adopts, having no right to the leases you can not complain. That is the obvious law of the case.

Now, section 14. Borrowing the statement of another gentleman, whom I will not name, we call this the "repealing clause":

That nothing in this act shall be construed as affecting or intending to affect or to in any way interfere with the laws of any State relating to the control, appropriation, use, or distribution of water.

Since the bill has said, in all its details, and since it is asserted here that we must comply with such conditions as the United States imposes as the owner of the lands, and we have no right to do it without its consent and upon terms it may give, and since that right is absolutely written into the law, if it did not control the right to control the appropriation and beneficial use of water it would not go into effect at all, because that is what it does in every one of its phases, and that is what it does in every one of its provisions; and, of course, it does interfere with and does affect the laws of the State. But I suppose my friends in the department would naturally read into that—

"That nothing in this act shall be construed as affecting or intending to affect or to any way interfere with the laws of any State relating to the control, appropriation, use, or distribution of water," "except as in this act provided"; and in this act provided they have their control and their right of prohibition; and, of course, it does apply to the control and distribution of the water.

There was one matter, Senator Norris, that I wanted to clear up and call to your attention, and that is this: You asked Secretary Fisher yesterday if that provision of section 9 in regard to the inaction of a State was taken out, then if the Secretary of the Interior

would enjoy these powers, which are the powers of regulating bond issues and rates and other matters concerning the government of the company, and he said that he would not.

I want to call your attention to the fact that at least in five sections of this bill, without any relation to whether the State is acting or not, the Secretary of the Interior shall control—in the first place no bond or lien can be created upon this property, and of course none can be sold unless it is upon the property, without his direction—has absolute control over the bond issue, stock issue, and everything, because you can only make a lien upon the property upon such conditions as he may prescribe, and it gives him absolute, arbitrary, and complete control over stock issues, bond issues, and the financing of the company in every respect, because he would not approve a lien or a bond issue unless upon conditions satisfactory to himself. That is not dependent upon whether the State is exercising the power or not, but he could prohibit the financing of a company in a State where the State was fully exercising its power.

Then the provision as to physical connections is not related to whether the State is making connection or not.

I have looked the bill through, and there are five or six essential and controlling provisions in the bill whereby, notwithstanding the State is doing everything, all those things the Secretary of the Interior is given the power of control over them, just as much in a State that is doing them as in a State that is not doing them, and the only single thing written into section 9 that may be done in a State that is not exercising all its powers, that can not be done in a State where the State is performing all its functions, is the regulation of rates.

Secretary Fisher did not intend to misrepresent that matter, but I have a right, since the most capable gentleman who has testified before this committee, or at least as capable as any other has wholly misconstrued the law and misunderstood it, to say that we want to get down to brass tacks and state that this bill—top, bottom, and roots—does what it really does—give authority over these matters equivalent to control over the birth, life, and death of this industry and provides that that authority shall be exercised by the Secretary of the Interior without respect to whether the State is exercising its powers and functions or not. I do not think he, the present Secretary, will destroy them. I do not know what he or his successor may do. I do not know. I assume that he will do the best he can, but we can not assume what he will do when we give all these amazing powers, or that we give them except with the idea that it may be necessary to do something in a State, and it is not confined to the States that are not exercising their functions in this respect; it is not only in those States, but in all of the public-land States, that he can exercise this power of controlling the water rights.

Gentlemen, I feel that I have already very largely trespassed upon your time and attention, and there is only one final and very fundamental matter which I wish to present to you, and that is this:

This act is a frank, and in that respect commendable effort, in connection with the public lands, to exercise Federal authority and Federal jurisdiction in various States that everybody admits, as to a great deal of it, could not be pretended to be exercised in a State where the public lands do not exist. I should perhaps say that

when I referred to the 11 public-land States I did not mean to say that there were not other States containing public lands. I did not include Senator Robinson's State of Arkansas, which I know has some public lands, and several southern States. The United States Government has recently acquired lands—in fact, the United States could go around and buy up all the jurisdiction it needed in almost any State under this idea. All it would have to do would be to buy up the lands and then exercise this jurisdiction that it could not exercise before then, and if they sold it they would be ousted of jurisdiction, of course.

Therefore I want to point out that this act relates to the development of power less than to the policy and the right of Federal control. The right of Federal control is far more extended in conjunction with the navigable waters, not to bring in another subject, but to suggest simply that where power is developed by navigable water it is open to the acknowledged constitutional jurisdiction of the United States to say what shall be done with the navigable streams.

The authorities which I shall call to your attention illustrate that the Government of the United States is the proprietor, not the sovereign of these public lands. It has been so said by the Supreme Court of the United States many, many times. Therefore any governmental jurisdiction that it could exercise in conjunction with the public lands it could with more weight and reason exercise in conjunction with the development of power on navigable waters, because there it must be acknowledged it may refuse or consent, because that is the constitutional power and the paramount thing is the navigation, while with us the paramount thing, the sovereign power is the appropriation of the water and the development of the industry and the energy and the use in the State.

In that connection, before concluding, I want to call your attention to an extract from two or three decisions very briefly.

In the case of Pollard's Lessee *v.* Hagan (3 How., 212, p. 391) the Supreme Court of the United States used this language:

> And, if an express stipulation had been inserted in the agreement—

I read this because it reads as if it was written for this occasion, because here it proposes to write it into the agreement—

> And, if an express stipulation had been inserted in the agreement, granting the municipal right of sovereignty and eminent domain to the United States, such stipulation would have been void and inoperative, because the United States have no constitutional capacity to exercise municipal jurisdiction, sovereignty, or eminent domain within the limits of a State or elsewhere except in the cases in which it is especially granted.

Another case involving the Mississippi (Withers *v.* Buckley, 20 How.) was on the control of navigation, which is far more comprehensive than the public-land question, and the Supreme Court said:

> It can not be imputed to Congress that they ever designed to forbid or to withhold from the State of Mississippi the power of improving the interior of that State by means either of roads or canals or by regulating the rivers within its territorial limits, although a plan of improvement to be adopted might embrace or affect the course or the flow of rivers situated within the interior of the State. Could such an intention be ascribed to Congress, the right to enforce it may be confidently denied. Clearly Congress could exact of the new State the surrender of no attribute inherent in her character as a sovereign, independent State, or indispensible to her equality with her sister States, necessarily implied and guaranteed by the very nature of the Federal compact.

Obviously, and it may be said primarily, among the incidents of that equality, is the right to make improvements in the rivers, water courses, and highways situated within the State.

In the case of the Escanaba Co. *v.* Chicago (107 U. S.), the Supreme Court said:

The doctrine declared in these several decisions is in accordance with the more general doctrine now firmly established, that the commercial power of Congress is exclusive of State authority only when the subjects upon which it is exercised are national in their character, and admit and require uniformity of regulation affecting alike all the States. Upon such subjects only that authority can act which can speak for the whole country.

I think that is where has come in the idea that because the State is not exercising a power the Government may do so. A State may exercise a power and exercise it in conjunction with the regulative power of the United States under the Constitution, and when the power of the State comes in conflict with the constitutional power of the United States essential to all the States, then the power of the State to that extent, and to that extent only, must yield to the power granted to the Federal Government, as set down in the dicision, as it rightly should.

In that case it is further said:

On her admission she at once became entitled to and possessed of all the rights of dominion and sovereignty which belonged to the original States. She was admitted and could be admitted only on the same footing with them. The language of the resolution admitting her says: "On an equal footing with the oroginal States in all respects whatever." Equality of constitutional right and power is the condition of all the States of the Union, old and new. Illinois, therefore, as well observed by counsel, could afterwards exercise the same power over rivers within her limits that Delaware exercised over Black Bird Creek and Pennsylvania over the Schuylkill River.

Without wearying you gentlemen by reading these decisions, I want to call your attention to only one or two other extracts in another case, The United States *v.* Chicago (17 U. S., p. 82).

The court used this language:

It is not questioned that land within a State purchased by the United States as the mere proprietor, and not reserved or appropriated to any special purpose, may be liable to condemnation for streets or highways, like the land of other proprietors under the rights of eminent domain.

The only reason we are having all this trouble is that while the Supreme Court has said in this and other cases that it was not doubted that the lands of the United States are subject to the State's power of eminent domain, notwithstanding these decisions the difficulty of obtaining jurisdiction over the Federal Government remains. But if authority is needed that the constitutional and natural right is in the State to enjoy easements and uses over the lands of the United States just as freely as they would over other lands in the State, the authorities are abundant, and the only problem is the obtaining of jurisdiction over the United States so that the State may exercise the right that the Supreme Court of the United States says is in the State.

Then this statement, taken from 146 United States, page 434, cited at page 25 of my brief, Illinois Railroad Co. *v.* Illinois:

There can be no distinction between the several States of the Union in the character of the jurisdiction, sovereignty and dominion which they may possess and exercise over persons and subjects within their respective limits.

Senator WORKS. Did that grow out of the enabling act by which the State was admitted?

Mr. SHORT. It grew out of the consistent construction of the Constitution of the United States, including those sections, that it was absolute that no State could be admitted to the Union on unequal terms—for instance, in one case that I shall not read from, the United States made a treaty with the Indians, the Bannock Indians, in Wyoming, that they could hunt upon the public lands of the United States so long as the United States continued to be the proprietor of them; and the State of Wyoming passed a game law making closed seasons, and Race Horse, one of the chiefs of the Bannock Indians, hunted in the closed season, and they arrested him and put him in jail, and he sued out a writ of habeas corpus. You know the United States has the power to make treaties with the Indian tribes as well as with the foreign nations, and they had done this before Wyoming became a State. Yet the Supreme Court of the United States said that the law of Wyoming indispensably, as soon as it became a State, must operate and control over the lands of the Federal Government as over any other lands; and that is the uniform line of decisions.

Senator WORKS. It would seem to follow that if the Government could not impose conditions upon a State when she is admitted into the Union, that it would not apply to other States, it could not impose those conditions by subsequent legislation.

Mr. SHORT. It would seem to be undoubted, certainly.

The CHAIRMAN. That is the Race Horse case to which you referred a moment ago?

Mr. SHORT. Yes; that is cited in this brief, at page 14.

In a somewhat recent case, the case of Kansas *v.* Colorado (206 U. S.), cited in this brief, the Supreme Court said:

> But clearly it does not grant to Congress any legislative control over the States, and must, so far as they are concerned, be limited to authority over the property belonging to the United States within their limits.

That refers to the provision of the Constitution granting control over the lands to the United States.

> But clearly it does not grant to Congress any legislative control over the States, and must, so far as they are concerned, be limited to authority over the property belonging to the United States within their limits.

If this bill confines itself to those recent utterances of the Supreme Court of the United States, I will certainly be satisfied and happy, because it goes outside of them every step it takes.

In further commenting, Judge Brewer said:

> We do not mean that its legislation can override State laws in respect to the general subject of reclamation. While arid lands are to be found mainly, if not only, in the Western and newer States, yet the powers of the National Government within the limits of those States are the same (no greater and no less) than those within the limits of the original thirteen; and it would be strange if, in the absence of a definite grant of power, the National Government could enter the territory of the States along the Atlantic and legislate in respect to improving by irrigation or otherwise the lands within their borders.

Again:

> One cardinal rule underlying all the relations of the States to each other is that of equality of right. Each State stands on the same level with all the rest. It can impose its own legislation on no one of the others, and is bound to yield its own views to none.

That is the most recent utterance of the Supreme Court of the United States on this subject. While there have been cases referred to, such as the Chandler-Dunbar case, where the Supreme Court of the United States decided and could decide only two questions—that is, in the taking of submerged lands and improvements with them, could it take them without compensation, and decided it could. The Government claimed the right to charge for the power that the United States had developed at its own expense; that is to say, it had elevated the water, and if power could be developed by the increased head dropped down it expended the money, and it was held a reasonable charge for this increased power—no single question of government, no single question of the exercise of Federal authority over people or industries or anything that is contained in this bill was involved or could have been decided in the Dunbar case, because it was not in issue.

So much has been said of this case, the Chandler-Dunbar case, that brief reference to and brief quotations may be of assistance in directing attention to the fact that the case involved the question of the right of the United States to take submerged lands under navigable waters and remove structures placed thereon by Government consent, and it was held, under the authority of previous decisions, that this could be done and no compensation could be recovered. The question also was involved as to the right of the Federal authorities to collect a reasonable charge for the use of increased available power caused by the increased head created by Government structures and at Government expense, and it was held that a reasonable charge might be imposed, measured by the increased availability and strictly confined to compensation for such increased power made available at Government expense. Practically nothing else was involved or was or could have been decided. Absolutely no questions of a charge measured by the products of an industry under Federal or State laws was involved nor any question of extended rights or jurisdiction of the Federal Government, such as are inserted or attempted to be inserted, were involved or decided by implication or otherwise.

Not only this, but the Supreme Court, with painstaking care, pointed out that no question of nonnavigable waters or matters such as are here involved were there involved. The opinion is in the record in full, but to emphasize the situation we quote the following sentences:

> Whatever substantial private property rights exist in the flow of the stream must come from some right which that company has to construct and maintain such works in the river, such as dams, walls, dikes, etc., essential to the utilization of the power of the stream for commercial purposes. We may put out of view altogether the class of cases which deal with the right of riparian owners upon a nonnavigable stream to the use and enjoyment of the stream and its waters. The use of the fall of such a stream for the production of power may be a reasonable use consistent with the rights of those above and below. The necessary dam to use the power might completely obstruct the stream, but if the effect was not injurious to the property of those above or to the equal rights of those below, none could complain, since no public interest would be affected. We may also lay out of consideration the cases cited which deal with the rights of riparian owners upon navigable or nonnavigable streams as between each other. Nor need we consider cases cited which deal with the rights of riparian owners under State laws and private or public charters conferring rights. That riparian owners upon public navigable rivers have in addition to the rights common to the public certain rights to the use and enjoyment of the stream, which are incident to such ownership of the bank, must be conceded

These additional rights are not dependent upon title to the soil over which the river flows, but are incident to ownership upon the bank. Among these rights of use and enjoyment is the right, as against other riparian owners, to have the stream come to them substantially in its natural state, both in quantity and quality.

In view of the exaggerated claims here made as to what the Government may exact for a right of way of no real or of little value on the theory that the power generated is very valuable, we quote:

The requirement of the fifth amendment is satisfied when the owner is paid for what is taken from him. The question is what has the owner lost, and not what has the taker gained. (Boston Chamber of Commerce *v.* Boston, 217 U. S. 189, 194, 195.)

However, every decision of the Supreme Court of the United States that affects matters such as are contained in this bill is clear in opposition to its validity.

In conclusion, gentlemen, let me submit to you this: Suppose it were a matter of policy—suppose we were writing the Constitution of the United States over again to-day, and somebody would suggest that each of the States as they came into the Union, as they did come when Washington and Jefferson and the others put it in the compact under which the public lands came under the control of the Federal Government, that these States should be admitted on an equal footing with all the other States in every respect whatsoever. But suppose, gentlemen, it was suggested to you that you could amend the Constitution of the United States and leave it just as it is, providing for exact equality, but then write in the amendment that this bill proposes to get in by interpretation and by the use of the public lands, and say that all of the States should be equal, except those States where the United States had or should acquire public lands, but that in such a State it might exact of that State and the people of that State the payment of exceptional charges and taxes and compel it and its citizens to submit to rules and regulations and the exercise of such Government powers of the United States that the United States as a Government can not exercise in the other States. Do you gentlemen believe there ever would have been a United States if any such thing had been attempted? If you do, it is because you have not read the history of the adoption of the Constitution of the United States and the controversy over the public lands. It was then feared that such land held by the General Government might raise sectional issues and trouble, and it was only by the great minds of Virginia and some of the other great land-owning States that this thing was settled successfully at that time, and strictly upon the condition that the United States should never do what this bill attempts to do and pretends to do. I ask you gentlemen, now, if you could amend the Constitution of the United States, would you do it, and say that, notwithstanding the great powers and the equal powers of all the States, that in those exceptional States where there are public lands this Government could go into those States and could exercise powers and impose charges and governmental authority and do things which it could not by any possibility do in other States? Would you do it? Or do you believe in the equal and absolute right of opportunity and development of all the States and the equal and absolute right of opportunity of every citizen of the United States under equal laws that operate equally as to all States and all citizens of the United States?

I am afraid you gentlemen think I am very earnest about this matter. I am. Some of these gentlemen have dreamed of the West; but this applies—do not delude yourselves—to the whole United States. I have lived all my life in the West. I believe in it and I love it as a man only can who has grown up with and been well treated by the people of that western country, and I beg of you now not as the representative of these power companies but as a citizen of the United States not to attempt to write an amendment to the Constitution of the United States that these States are not free and equal and that their citizens have not the same rights to live and operate under the same laws as have the citizens of every other State in the United States.

The laws are sufficient. The powers of government in every State are sufficient for control over these industries, just as the laws apply to all other industries. That is all that is necessary, and all that ought to be attempted, I submit.

The CHAIRMAN. We thank you, judge, for your able argument.

Mr. SHORT. This brief I desire to be considered as a part of my argument, and ask to be put into the record as a part of my argument.

(The brief was allowed to be added and is as follows:)

MEMORANDUM OF AUTHORITIES TO SUSTAIN THE FOLLOWING PROPOSITIONS OF LAW CONCERNING RIGHTS OF WAY AND PUBLIC USES OVER THE PUBLIC LANDS AND FOREST RESERVES.

First. The Federal Government owns the public lands as proprietor and not as sovereign.

Second. That the Federal Government controls navigable waters solely for the purposes of protecting and perpetuating commerce between the States and preventing interference with navigation.

Third. That the powers, duties, and functions of the Federal Government are strictly defined in the Constitution, and all authority for the imposition of charges and the regulation of industries or business, or the exercise of police power within any State must be found in the Constitution, and no such power or authority is attendant upon or can be derived from its control over navigable waters or its proprietorship of the public lands.

Fourth. That the Constitution of the United States, and all laws of Congress must be so construed as to operate uniformly in all the States, including the original 13, and every one of the States since admitted, and no act of admission of any State could be so contrued as to change this rule of uniformity.

Fifth. That the right of the Federal Government to make rules and regulations concerning the public lands defines its proprietary right to make rules and regulations for the protection of its proprietary interest in such lands, and its right to ultimately dispose thereof, but conveys and implies no sovereign powers or power to interfere with the development of the resources of the State, the construction of roads, canals, and the like, or to impose unequal or unusual excise charges in any such State, or assume therein any police power or regulation, or authority over any of the inhabitants thereof or the industries therein that it might not exercise under its constitutional grant of powers independently of any navigable waters or public lands.

Sixth. That the State, subject to the control over the navigable waters for the protection of commerce between the States by the Federal Government, controls the water flowing in navigable and nonnavigable streams, and all rights to such water or the beneficial use thereof is and must be acquired from the State and under State laws, and the use of such water and the supply thereof, and charges therefor, are fully subject to the authority and control of the State and the Federal Government has no authority over or control of the use of such water, or the business conducted in connection therewith.

Seventh. That the State and its agents and citizens and corporations, incorporated for that purpose, not only has the right to the use of necessary rights of way over the public lands for the appropriation and beneficial use

of water, and these rights have not only existed (along with the right to roads and all other necessary means of communication) since the foundation of the Government, but the same have been not only so recognized by such custom but also by acts of Congress, which acts, however, have been construed not as granting the rights but as merely a recognition of a preexisting right arising out of the very nature of the compact and the constitutional relations between the Federal Government and the several States.

Eighth. That the rules and regulations of the Federal Government with respect to navigable waters and public lands (including laws for the regulation of commerce between the States) may be fully adequate for all such purposes. And such rules and regulations concerning the public lands may and should fully protect the Government interest therein as proprietor thereof, and its right to the ultimate disposition of the same must nevertheless be construed and enforced with due regard and in subordination to the preexisting and constitutionally guaranteed right of the State to provide for the full development of all of the resources of the State, to provide and keep open all necessary means of travel and communication in the State, including roads and railroads, canals for commerce, and the beneficial use of water and all public ways and means for the use of the people of the State. So that each State, not by favor of the Federal Government, but as a guaranteed matter of constitutional right, may be as free from exceptional taxes and charges, Federal interference and control, as any other State regardless of the existence or nonexistence of public lands or navigable waters therein.

To illustrate: So that in Colorado, where there exists great areas of public lands, the citizens of that State may as freely develop and enjoy its resources and have and enjoy the uses and rights of way therefor; and exercise and enjoy as full and free local self-government and police regulation, submitting to the same, but no greater Federal authority and control than exists under the Constitution of the United States in the State of Texas, where there are not and never have been any public lands. And so that the power of Colorado over its waters, the uses thereof and the revenues derived therefrom, shall be and remain exactly the same in Colorado as in Texas, and further, arguendo, we submit that no sound reason of constitutional law or public policy can be suggested to the contrary.

Recognizing, as we must, that all of the governmental powers possessed by Texas are inherent in and exist as fully in Colorado, so that the presence or absence of Government-owned lands need not and should not be allowed in any State to help or hinder the people of such State in the exercise and enjoyment of full and complete self-government.

The following is submitted as a memoranda of authorities only and not as a brief, but is filed in support of and to sustain the argument made in a brief submitted some months ago by the author of this memorando, Frank H. Short, of Fresno, Cal., and a copy of that brief can be obtained by application to him or to Britton & Gray, Washington, D. C.

For convenience some of the authorities cited in that brief are repeated here but not quoted from at so great length.

By reason of the fact that some of the authorities cited sustain several of the propositions above named no effort is made to cite the authorities separately to sustain the propositions above enumerated, but in a general way the same order is followed and the quotations indicate the points covered by the authorities.

Pollard's Lessee v. Hagan (3 How., 212; 15 U. S., 391):

"And we now enter into its examination with a just sense of its great importance to all the States of the Union and particularly to the new ones. Although this is the first time we have been called upon to draw the line that separates the sovereignty and jurisdiction of the Government of the Union and the State governments over the subject in controversy, many of the principles which enter into and form the elements of the question have been settled by previous well-considered decisions of this court, to which we shall have occasion to refer in the course of this investigation.

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"We think a proper examination of this subject will show that the United States never held any municipal sovereignty, jurisdiction, or right of soil in and to the territory of which Alabama or any of the new States were formed, except for temporary purposes and to execute the trusts created by the acts of the Virginia and Georgia Legislatures and the deeds of cession executed by

them to the United States and the trust created by the treaty with the French Republic of the 30th of April, 1803, ceding Louisiana.

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"When Alabama was admitted into the Union, on an equal footing with the original States, she succeeded to all the rights of sovereignty, jurisdiction, and eminent domain which Georgia possessed at the date of the cession, except so far as this right was diminished by the public lands remaining in the possession and under the control of the United States, for the temporary purposes provided for in the deed of cession and the legislative acts connected with it. Nothing remained to the United States, according to the terms of the agreement, but the public lands. And if an express stipulation had been inserted in the agreement granting the municipal right of sovereignty and eminent domain to the United States, such stipulation would have been void and inoperative, because the United States have no constitutional capacity to exercise municipal jurisdiction, sovereignty, or eminent domain within the limits of a State or elsewhere, except in the cases in which it is expressly granted.

"By the sixteenth clause of the eighth section of the first article of the Constitution power is given to Congress 'to exercise exclusive legislation in all cases whatsoever over such District (not exceeding 10 miles square) as may by cession of particular States, and the acceptance of Congress, become the seat of government of the United States, and to exercise like authority over all places purchased by the consent of the legislature of the State in which the same may be for the erection of forts, magazines, arsenals, dockyards, and other needful buildings.' Within the District of Columbia and the other places purchased and used for the purposes above mentioned the national and municipal powers of government of every description are united in the Government of the Union. And these are the only cases within the United States in which all the powers of government are united in a single Government, except in the cases already mentioned of the temporary Territorial governments, and there a local government exists. The right of Alabama and every other new State to exercise all the powers of government which belong to and may be exercised by the original States of the Union must be admitted and remain unquestioned except so far as they are temporarily deprived of control over the public lands.

"We will now inquire into the nature and extent of the right of the United States to these lands, and whether that right can in any manner affect or control the decision of the case before us. This right originated in voluntary surrenders, made by several of the old States, or their waste and unappropriated lands, to the United States, under a resolution of the old Congress of the 6th of September, 1780, recommending such surrender and cession, to aid in paying the public debt, incurred by the War of the Revolution. The object of all the parties to these contracts of cession was to convert the land into money for the payment of the debt and to erect new States over the territory thus ceded; and as soon as these purposes could be accomplished the power of the United States over these lands, as property, was to cease.

"Whenever the United States shall have fully executed these trusts the municipal sovereignty of the new States will be complete throughout their respective borders, and they and the original States will be upon an equal footing in all respects whatever. We therefore think the United States hold the public lands within the new States by force of the deeds of cession and the statutes connected with them, and not by any municipal sovereignty which it may be supposed they possess or have reserved by compact with the new States for that particular purpose. The provision of the Constitution above referred to shows that no such power can be exercised by the United States within a State. Such a power is not only repugnant to the Constitution, but it is inconsistent with the spirit and intention of the deeds of cession. The argument, so much relied on by the counsel for the plaintiffs, that the agreement of the people inhabiting the new States 'that they forever disclaim all right and title to the waste or unappropriated lands lying within the said territory and that the same shall be and remain at the sole and entire disposition of the United States,' can not operate as a contract between the parties, but is binding as a law. Full power is given to Congress 'to make all needful rules and regulations respecting the territory or other property of the United States.' This authorized the passage of all laws necessary to secure the rights of the United States to the public lands and to provide for their sale and to protect them from taxation

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"The propositions submitted to the people of the Alabama Territory, for their acceptance or rejection, by the act of Congress authorizing them to form

: constitutional and State government themselves, so far as they related to the public lands within that Territory, amounted to nothing more nor less than rules and regulations respecting the sales and disposition of the public lands.

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"If, in the exercise of this power, Congress can impose the same restrictions upon the original States, in relation to their navigable waters, as are imposed by this article of the compact on the State of Alabama, then this article is a mere regulation of commerce among the several States, according to the Constitution, and, therefore, as binding on the other States as Alabama.

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"By the preceding course of reasoning we have arrived at these general conclusions: First, the shores of navigable waters, and the soils under them, were not granted by the Constitution to the United States, but were reserved to the States, respectively; secondly, the new States have the same rights, sovereignty, and jurisdiction over this subject as the original States; thirdly, the right of the United States to the public lands and the power of Congress to make all needful rules and regulations for the sale and disposition thereof conferred no power to grant to the plaintiffs the land in controversy in this case. The judgment of the Supreme Court of the State of Alabama is, therefore, affirmed."

We have quoted quite liberally from this case because in principle it decides nearly everything we contend for and has been frequently cited and affirmed. The supreme court bench was most eminent at this time, and as all of the judges concurred except Justice Catron, who, in dissenting from some of the views of his associates, used this language (p. 409):

"I have expressed these views in addition to those formerly given, because this is deemed one of the most important controversies ever brought before this court on any title, either as it respects the amount of property involved, or the principles on which the present judgment proceeds, principles, in my judgment, as applicable to the high lands of the United States as to the low lands and shores."

Veazie v. Wyman (14 How., 568; 20 U. S., 345), considering the claimed control of the United States over commerce on the Penobscot River, in Maine, the court said (pp. 348, 349):

"Such a pretension would effectually prevent or paralyze every effort at internal improvement by the several States; for it can not be supposed, that the States would exhaust their capital and their credit in the construction of turnpikes, canals, and railroads, the remuneration derivable from which, and all control over which might be immediately wrested from them, because such public works would be facilities for a commerce which, whilst availing itself of those facilities, was unquestionably internal, although intermediately or ultimately it might become foreign.

"The rule here given with respect to the regulation of foreign commerce, equally excludes from the regulation of commerce between the States and the Indian tribes, the control over turnpikes, canals, or railroads, or the clearing and deepening of watercourses exclusively within the States, or the mangement of the transportation upon and by means of such improvements. In truth, the power vested in Congress by Article I, section 8 of the Constitution, was not designed to operate upon matters like those embraced in the statute of the State of Maine, and which are essentially local in their nature and extent. The design and object of that power, as evinced in the history of the Constitution, was to establish a perfect equality amongst the several States as to commercial rights, and to prevent unjust and invidious distinctions, which local jealousies, or local and partial interests might be disposed to introduce and maintain.

"These were the views pressed upon the public attention by the advocates for the adoption of the Constitution, and in accordance therewith have been the expositions of this instrument propounded by this court in decisions quoted by counsel on either side of this cause, though differently applied by them. (Vide The Federalist, Nos. 7 and 11, and the cases of Gibbons *v.* Ogden, 9 Wheat., 1; New York *v.* Milne, 11 Pet., 102; Brown *v.* The State of Maryland, 12 Wheat., 419; and the License Cases in 5 How., 504.)"

Withers *v.* Buckley (20 How., 84). This in principle and in all respects is one of the most important cases in the books. Its significance can only be realized by careful reading. We therefore quote at some length, as follows (pp. 92, 93):

"In considering this act of Congress of March 1, 1817, it is unnecessary to institute any examination or criticism as to its legitimate meaning or operation

or binding authority further than to affirm that it could have no effect to restrict the new State in any of its necessary attributes as an independent sovereign government, nor to inhibit or diminish its perfect equality with the other members of the Confederacy with which it was to be associated. These conclusions follow from the very nature and objects of the Confederacy, from the language of the Constitution adopted by the States and from the rule of interpretation pronounced by this court in the case of Pollard's Lessee v. Hagan (3 How., p. 223). The act of Congress of March 1, 1817, in prescribing the free navigation of the Mississippi and the navigable waters flowing into this river, could not have been designed to inhibit the power inseparable from every sovereign or efficient government to devise and to execute measures for the improvement of the State, although such measures might induce or render necessary changes in the channels or courses of rivers within the interior of the State or might be productive of a change in the value of private property. Such consequences are not unfrequently and, indeed, unavoidably incident to public and general measures highly promotive of and absolutely necessary to the public good. And here it may be asked whether the law complained of and the measures said to be in contemplation for its execution are in reality in conflict with the act of Congress of March 1, 1817, with respect either to the letter or the spirit of the act? On this point may be cited the case of Veazie et al. v. Moor (14 How., 568).

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"But, for argument, let it be conceded that this derelict channel of the Mississippi, called Old River, is in truth a navigable river leading or flowing into the Mississippi; it would by no means follow that a diversion into the Buffalo Bayou of waters, in whole or in part, which pass from Homochitto into Old River, would be a violation of the act of Congress of March 1, 1817, in its letter or its spirit; or of any condition which Congress had power to impose on the admission of the new State. It can not be imputed to Congress that they ever designed to forbid, or to withhold from the State of Mississippi, the power of improving the interior of that State, by means either of roads or canals, or by regulating the rivers within its territorial limits, although a plan of improvement to be adopted might embrace or affect the course or the flow of rivers situated within the interior of the State. Could such an intention be ascribed to Congress, the right to enforce it may be confidently denied. Clearly, Congress could exact of the new State the surrender of no attribute inherent in her character as a sovereign independent State, or indispensable to her equality with her sister States, necessarily implied and guaranteed by the very nature of the Federal compact. Obviously, and it may be said primarily, among the incidents of that equality, is the right to make improvements in the rivers, watercourses, and highways situated within the State."

Escanaba Co. v. Chicago (107 U. S., 678, 687):

"The doctrine declared in these several decisions is in accordance with the more general doctrine now firmly established, that the commercial power of Congress is exclusive of State authority only when the subjects upon which it is exercised are national in their character, and admit and require uniformity of regulation affecting alike all the States. Upon such subjects only that authority can act which can speak for the whole country. Its nonaction is therefore a declaration that they shall remain free from all regulation. (Welton v. State of Missouri, 91 U. S., 275; Henderson v. Mayor of New York, 92 id., 259. County of Mobile v. Kimball, 102 id., 691.)

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"Bridges over navigable streams which are entirely within the limits of a State are of the latter class. The local authority can better appreciate their necessity and can better direct the manner in which they shall be used and regulated than a government at a distance. It is, therefore, a matter of good sense and practical wisdom to leave their control and management with the States, Congress having the power at all times to interfere and supersede their authority whenever they act arbitrarily and to the injury of commerce."

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"On her admission she at once became entitled to and possessed of all the rights of dominion and sovereignty which belonged to the original States. She was admitted, and could be admitted, only on the same footing with them. The language of the resolution admitting her is 'on an equal footing with the original States in all respects whatever.' (3 Stat., 536.) Equality of constitutional right and power is the condition of all the States of the Union, old and new.

Illinois, therefore, as well observed by counsel, could afterwards exercise the same power over rivers within her limits that Delaware exercised over Black Bird Creek and Pennsylvania over the Schuylkill River. (Pollard's Lessee *v.* Hagan, 3 How., 212; Permoli *v.* First Municipality, id., 589; Strader *v.* Graham, 10 id., 82.)"

In Huse *v.* Glover (119 U. S., 543) the court said (pp. 548, 549):

"The State is interested in the domestic as well as in the interstate and foreign commerce conducted on the Illinois River, and to increase its facilities and thus augment its growth it has full power. It is only when in the judgment of Congress its action is deemed to encroach upon the navigation of the river as a means of interstate and foreign commerce that that body may interfere and control or supersede it. If in the opinion of the State greater benefit would result to her commerce by the improvements made than by leaving the river in its natural state—and on that point the State must necessarily determine for itself—it may authorize them, although increased inconvenience and expense may thereby result to the business of individuals. The private inconvenience must yield to the public good. The opening of a new highway or the improvement of an old one, the building of a railroad, and many other works in which the public is interested may materially diminish business in certain quarters and increase it in others; yet for the loss resulting the sufferers have no legal ground of complaint. How the highways of a State, whether on land or by water, shall be best improved for the public good is a matter for State determination, subject always to the right of Congress to interpose in the cases mentioned. (Spooner *v.* McConnell, 1 McLean, 337; Kellogg *v.* Union Co., 12 Conn., 7; Thames Bank *v.* Lovell, 18 Conn., 500; S. C., 46 Am. Dec., 332; McReynolds *v.* Smallhouse, 8 Bush, 447.)"

Ward *v.* Race Horse (163 U. S., 504). The court in this case holds that a treaty with the Indians was abrogated by the act admitting Wyoming and that thereafter the Indians could not hunt on the public lands contrary to State laws.

The court cites approvingly: Pollard *v.* Hagan, supra; Withers *v.* Buckley, supra; Escanaba Co. *v.* Chicago, supra; Cardwell *v.* American Bridge Co. (113 U. S., 205). Willamette Iron Bridge Co. *v.* Hatch (125 U. S., 1), quoting from these cases with approval, and following such quotations with this language (p. 514):

"The power of all the States to regulate the killing of game within their borders will not be gainsaid, yet, if the treaty applies to the unoccupied land of the United States in the State of Wyoming that State would be bereft of such power, since every isolated piece of land belonging to the United States as a private owner, so long as it continued to be unoccupied land, would be exempt in this regard from the authority of the State. Wyoming, then, will have been admitted into the Union, not as an equal member, but as one shorn of a legislative power vested in all the other States of the Union, a power resulting from the fact of statehood and incident to its plenary existence."

Stands *v.* Manistee River Improvement Co. (123 U. S., 288, 296):

"Yet from the very conditions on which the States formed out of that territory were admitted into the Union, the provisions of the ordinance became inoperative except as adopted by them. All the States thus formed were in the language of the resolutions or acts of Congress, 'admitted into the Union on an equal footing with the original States in all respects whatever.' Michigan, on her admission, became, therefore, entitled to and possessed of all the rights of sovereignty and domain which belonged to the original States, and could at any time afterwards exercise full control over its navigable waters except as restrained by the Constitution of the United States and laws of Congress passed in pursuance thereof. (Permoli *v.* First Municipality of New Orleans, 3 How., 589, 600; Pollard *v.* Hagan, 3 How., 212; Escanaba Co. *v.* Chicago, 107 U. S., 678, 688; Van Brocklin *v.* Tennessee, 117 U. S., 151, 159; Huse *v.* Glover, 119 U. S., 543, 546.)"

(See also long line of Federal cases cited in Rose's Notes to U. S. Reports, under Pollard *v.* Hagan.)

In United States *v.* Chicago (17 U. S., 82; 7 How., 185) the court held that the city of Chicago could not lay out city streets over the tract of land on which Fort Dearborn was situated, it being dedicated to military purposes by the Government. The court was careful to limit the decision, however, by the following language, on page 87:

"It is not questioned that land within a State purchased by the United States as a mere proprietor and not reserved or appropriated to any special purpose

may be liable to condemnation for streets or highways, like the land of other proprietors, under the rights of eminent domain."

United States v. R. R. (6 McLean; 27 Fed. Cases, p. 692) involved two questions: The obstruction of navigation and use of public lands for a railroad bridge. This decision is, we think, conclusive on principle and is entirely consistent with the decisions of the Supreme Court of the Unted States on all points, we think, except the inference that in the absence of agreement the State could tax property of the United States, which it is now held can not be done. The case, however, in holding State may without the Government's consent and against its objection use the public lands, holds more than is involved in this discussion. We are not discussing whether the United States, as proprietor, can insist upon its proprietary rights in connection with the use of public lands for purposes of roads and canals, etc., necessary to develop the State's resources.

What we are contending for is that it, the United States, can not assert any sovereignty or taxing powers or police control in a State by virtue of its ownership of public lands, nor so assert its proprietorship as to destroy the right of and impede the State and its inhabitants in developing its resources by constructing all necessary roads, canals, and means of communication. Nor can the Federal Government imposes any excise charges, fix any terms, assert any sovereignty or police power in connection with or as a condition in connection with permitting such use.

In holding that the Federal Government can not at all refuse the use of the public lands for these necessary public uses, Judge McLean is sustained, we think, in principle by many of the decisions of the United States Supreme Court and by several adjudications which we cite to the effect that all such rights, by the very nature of the Federal compact, must exist in the State and can not be denied by the Federal Government. We quote from the opinion (27 Fed. Cases, pp. 692–693):

"Within the limits of a State Congress can, in regard to the disposition of the public lands and their protection, make all needful rules and regulations. But beyond this it can exercise no other acts of sovereignty which it may not exercise in common over the lands of individuals. A mode is provided for the cession of jurisdiction when the Federal Government purchases a site for a military post, a customhouse, and other public buildings; and if this mode be not pursued, the jurisdiction of the State over the ground purchased remains the same as before the purchase. This, I admit, is not a decided point, but I think the conclusion is maintainable by the deductions of constitutional law.

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"But the important inquiry is, whether the public lands are subject to the sovereignty of the State in which they are situated.

"It is a fair implication, that if the State were not restrained by compact, it could tax such lands. In many instances the States have taxed the lands on which our customhouses and other public buildings have been constructed, and such taxes have been paid by the Federal Government. This applies only to the lands owned by the Government as a proprietor, the jurisdiction never having been ceded by the State. The proprietorship of land in a State by the General Government can not, it would seem, enlarge its sovereignty or restrict the sovereignty of the State. This sovereignty extends to the State limits over the territory of the State, subject only to the proprietary right of the lands owned by the Federal Government, and the right to dispose of such lands and protect them under such regulations as it may deem proper. The State organizes its territory into counties and townships, and regulates its process throughout its limits, and in the discharge of the ordinary functions of sovereignty, a State has a right to provide for intercourse between the citizens, commercial and otherwise, in every part of the State, by the establishment of easements, whether they may be common roads, turnpike, plank, or rail roads. The kind of easement must depend upon the discretion of the legislature. And this power extends as well over the lands owned by the United States, as to those owned by individuals. This power it is believed has been exercised by all the States in which the public lands have been situated. It is a power which belongs to the State and the exercise of which is essential to the prosperity and advancement of the country. State and county roads have been established and constructed over the public lands in a State under the laws of the State, without any doubt of its power, and with the acquiescence of the Federal Government. In this respect the lands of the public have been treated and appropriated by the State as the lands of individuals. These easements have so manifestly

conduced to the public interest that no objection from any quarter has hitherto been made. And it is believed that this power belongs to the States.

"It is difficult to perceive on what principle the mere ownership of land by the General Government within a State should prohibit the exercise of the sovereign power of the State in so important a matter as the easements named. In no point of view are these improvements prejudicial to the general interest; on the contrary they greatly promote it. They encourage population and increase the value of land. In no respect is the exercise of this power by the State inconsistent with a fair construction of the constitutional power of Congress over the public lands. It does not interfere with the disposition of the lands and instead of lessening enhances their value.

"Where lands are reserved or held by the General Government for specified and national purposes it may be admitted that a State can not construct an easement which shall in any degree affect such purposes injuriously. No one can question the right of the Federal Government to select the sites for its forts, arsenals, and other public buildings. The right claimed for the State has no reference to lands specially appropriated, but to those held as general proprietor by the Government, whether surveyed or not. The right of eminent domain appertains to a State sovereignty, and it is exercised free from the restraints of the Federal Constitution. The property of individuals is subject to this right, and no reason is perceived why the aggregate property in a State, of the individuals of the Union, should not also be subject to it. The principle is the same and the beneficial result to the proprietors is the same, in proportion to their interests. These easements have their source in State power and do not belong to Federal action. They are necessary for the public at large and essential to the interests of the people of the State. The power of a State to construct a road necessarily implies the right not only to appropriate the line of the road, but the materials necessary for its construction and use. Whether we look to principle, or the structure of Federal and State Governments, or the uniform practice of the new States, there would seem to be no doubt that a State has the power to construct a public road through the public lands. A grant to this effect is sometimes made by Congress, as in the act of 1852; but this does not show the necessity of such a grant. Generally Congress appropriates to the road a large amount of lands. The positions are believed to be irrefragable—first, that the right of eminent domain is in the State; and secondly, that the exercise of this right by a State is nowhere inhibited, expressly or impliedly, in the Federal Constitution or in the powers over the public lands by that instrument in Congress."

The leading case of Shively *v.* Bowlby (152 U. S., p. 1), involving directly the title and jurisdiction over lands under navigable waters, fully reviews all the previous decisions and most exhaustively considers all of the questions, and finally, it may be assumed, set them at rest.

In this same connection it considered many questions appertaining to the public lands; cited and affirmed all of the earlier cases. Anyone desiring to more fully study the subject will find nearly everything of value considered and decided in this case, citing Pollard *v.* Hagan, supra (pp. 26, 27).

Holding (p. 28) that the case did not turn upon the deed of cession but upon general principles, as shown by the authorities cited. We quote from this case (152 U. S., pp. 49, 57, 58):

"'The title to the shore and lands under tidewater,' said Mr. Justice Bradley, 'is regarded as incidental to the sovereignty of the State—a portion of the royalties belonging thereto and held in trust for the public purposes of navigation and fishery.'

* * * * * * *

"The Congress of the United States, in disposing of the public lands, has constantly acted upon the theory that those lands, whether in the interior or on the coast, above high-water mark, may be taken up by actual occupants in order to encourage the settlement of the country.

* * * * * * *

"Upon the acquisition of a territory by the United States, whether by cession from one of the States, or by treaty with a foreign country, or by discovery and settlement, the same title and dominion passed to the United States for the benefit of the whole people and in trust for the several States to be ultimately created out of the territory.

"The new States admitted into the Union since the adoption of the Constitution have the same rights as the original States in the tidewaters and in the

lands under them within their respective jurisdictions. The title and rights of riparian or littoral proprietors in the soil below high-water mark, therefore, are governed by the laws of the several States, subject to the rights granted to the United States by the Constitution.

"The United States, while they hold the country as a territory, having all the powers both of national and of municipal government, may grant, for appropriate purposes, titles or rights in the soil below high-water mark of tidewaters. But they have never done so by general laws, and unless in some case of international duty or public exigency, have acted upon the policy as most in accordance with the interest of the people and with the object for which the Territories were acquired, of leaving the administration and disposition of the sovereign rights in navigable waters and in the soil under them to the control of the States, respectively, when organized and admitted into the Union.

"Grants by Congress of portions of the public lands within a Territory to settlers thereon, though bordering on or bounded by navigable waters, convey, of their own force, no title or right below high-water mark, and do not impair the title and dominion of the future State when created, but leave the question of the use of the shores by the owners of uplands to the sovereign control of each State, subject only to the rights vested by the Constitution in the United States."

Leovy v. United States (177 U. S., p. 630) (opinion by the late Justice Shiras): Holding in favor of right of Louisiana to reclaim swamp and overflowed lands where claimed in conflict with navigation; a clear and strong opinion. It will be observed that while there are a number of cases in point as to claimed conflicts between Federal and State laws as to public lands, they are not so numerous as the cases with respect to matters pertaining to navigation. This for the obvious reason that the Federal Government has large functions to perform in regulating and protecting the public uses in connection with navigable waters. Its duties, however, as to the public lands are comparatively few and simple—to protect its proprietary rights and ultimate right of disposal. All other powers and duties so clearly belong to the State that conflicts, except incidental ones, are purely gratuitous. The effort to exercise taxing or police powers, or powers of regulating local industries by the Federal Government, in connection with the public lands, are of such recent origin, so totally unwarranted and unnecessary, that few decisions can be found in point. But when they do occur they are very much in point, and no case can be cited as a basis for the claim of any sovereign powers or duties, control or regulation pertaining to the public lands on the part of the Federal Government in any State.

In People v. Shearer (30 Cal., p. 658) Judge Sawyer said, in substance:

"The relation of the United States to the public lands since the admission of California into the Union is simply proprietary—that of an owner of the lands, like any citizen who owns land—and not that of a municipal sovereignty."

In United States v. Cornell (2 Mason, p. 60) Justice Story said, in substance:

"The purchase of lands by the United States for public purposes within the territorial limits of a State does not of itself oust the jurisdiction or sovereignty of such State over such lands so purchased."

Further, Judge Story says:

"Exclusive jurisdiction is the necessary attendant upon exclusive legislation. The Constitution of the United States declares that Congress shall have the power to exercise 'exclusive legislation' in all 'cases whatsoever' over all places purchased by the consent of the legislature of the State in which the same shall be, for the erection of forts, magazines, arsenals, dockyards, and other needful buildings.

"When, therefore, a purchase of land for any of these purposes is made by the National Government, and the State legislature has given it consent to the purchase, the land so purchased, by the very terms of the Constitution, ipso facto, falls within the exclusive legislation of Congress, and the State jurisdiction is completely ousted.

"For it may well be doubted whether Congress are, by the terms of the Constitution, at liberty to purchase lands for forts, dockyards, etc., with the consent of a State legislature where such consent is so qualified that it will not justify the 'exclusive legislation' of Congress there."

See also, Woodruff v. North Bloomfield, etc., Co. (18 Fed. Cases, p. 772):

"Upon the cession of California by Mexico, the sovereignty and the proprietorship of all the lands within its borders, in which no private interest had vested, passed to the United States. Upon the admission of California into

the Union, upon an equal footing with the original States, the sovereignty for all internal municipal purposes and for all purposes except such purposes and with such powers as are expressly conferred upon the National Government by the Constitution of the United States, passed to the State of California. Thenceforth, the only interest of the United States in the public lands was that of a proprietor, like that of any other proprietor, except that the State, under the express terms upon which it was admitted, could pass no laws to interfere with their primary disposal, and they were not subject to taxation. In all other respects the United States stood upon the same footing as private owners of land. They could authorize no invasion of private property, either to enable their grantees to mine the lands purchased by them of the Government, or otherwise. (Biddle Boggs *v.* Merced Min. Co., 14 Cal., 375, 376; People *v.* Shearer, 30 Cal., 658; Pollard's Lessee *v.* Hagan, 3 How., 223.) The observations of Chief Justice Field in the first case cited, on pages 375, 376, are as applicable to this point as to that under discussion in that case."

See, also, Mobile *v.* Eslava (16 Pet., p. 277), where the Supreme Court say in substance:

"The United States then may be said to claim for the public an easement for the transportation of merchandise, etc., in the navigable waters of the original States, while the right of property remains in the States.

"The original States possessing this interest in the waters within their jurisdictional limits, the new States can not stand upon an equal footing with them as members of the Union if the United States still retain over their navigable waters any other right than is necessary to the exercise of its constitutional powers. To recapitulate, we are of opinion: First, that the navigable waters within this State have been dedicated to the use of the citizens of the United States, so that it is not competent for Congress to grant a right of property in the same * * *"

We quote again from the case of Illinois R. R. Co. *v.* Illinois (146 U. S., 434):

"The State of Illinois was admitted into the Union in 1818 on an equal footing with the original States in all respects. Such was one of the conditions of the cession from Virginia of the territory northwest of the Ohio River, out of which the State was formed. But the equality prescribed would have existed if it had not been thus stipulated. There can be no distinction between the several States of the Union in the character of the jurisdiction, sovereignty, and dominion which they may possess and exercise over persons and subjects within their respective limits."

How does this language lie parallel with the claim of some of our fellow citizens that the United States Government in States having public lands can impose terms on perpetual beneficial uses, unusual charges and restrictions, control over monopolies, and police powers in such States which the Federal Government does not claim to possess or exercise in other States?

See also New Orleans *v.* United States (10 Pet., 317), where the Supreme Court says:

"The Government of the United States, as was observed in the argument, is one of limited powers. It can exercise authority over no subjects except those which have been delegated to it. Congress can not by legislation enlarge the Federal jurisdiction nor can it be enlarged under the treaty-making power."

See Jennison *v.* Kirk (98 U. S., p. 450). Relating to the appropriation and beneficial use of water on the public lands and construing section 2339, Revised Statutes, we quote, page 458:

"Numerous regulations were adopted or assumed to exist from their obvious fitness for the security of these ditches and flumes and the protection of rights to water, not only between different appropriators, but between them and the holders of mining claims. These regulations and customs were appealed to in controversies in the State courts and received their sanction, and properties to the value of many millions rested upon them. For 18 years—from 1848 to 1866—the regulations and customs of miners, as enforced and molded by the courts and sanctioned by the legislation of the State, constituted the law governing property in mines and in water on the public mineral lands."

Broder *v.* Water Co. (101 U. S., 274). We quote from page 276:

"It is the established doctrine of this court that rights of miners who had taken possession of mines and worked and developed them, and the rights of persons who had constructed canals and ditches to be used in mining operations and for purposes of agricultural irrigation in the region where such artificial use of the water was an absolute necessity, are rights which the Government

had, by its conduct, recognized and encouraged and was bound to protect before the passage of the act of 1866. We are of opinion that the section of the act which we have quoted was rather a voluntary recognition of a preexisting right of possession, constituting a valid claim to its continued use, than the establishment of a new one. This subject has so recently received our attention and the grounds on which this construction rests are so well set forth in the following cases that they will be relied on without further argument: Atchison v. Peterson (20 Wall., 507); Basey v. Gallagher (id., 670); Forbes v. Gracey (94 U. S., 762); Jennison v. Kirk (98 id., 453)."

Under these decisions, with others cited in the quotation, it becomes elementary that the United States Government has uniformly recognized in all the States the right of the States to control and regulate the use of water for beneficial purposes and to take, use, and enjoy all necessary rights of way therefor. That this was not done as a mere gratuity, or even in pursuance of a well-defined and wise policy of aiding and encouraging the development of the country is manifest. It appears that it had a deeper significance, resting in the very nature of the Federal compact, and was a policy necessary in order that the younger States might fully enjoy that equality of opportunity guaranteed by the Constitution, and which had been uniformly recognized in the original and earlier admitted States.

The most that can be claimed is that the Federal Government might now, however inequitable it might be so to do, adopt rules and regulations under which, as a private proprietor, it could exact and receive such compensation as another private proprietor might exact within a State for a right of way connected with a public use. In so doing it could not, under the law, claim to be acting pursuant to any public duty, or for the public benefit, but merely as a selfish, private proprietor exacting, in connection with the development of local industry, such damages as resulted to its lands in connection with the easement or use.

That its rights as a proprietor could in no event be so asserted as to impede or prevent the development of the State's resources, or impose upon its citizens any unusual charge, or any terms or rights of way connected with continuing public uses, or reserve any official control or police power or regulation of business, or monopolies in Federal authority, or in any manner invade or seek to exercise such powers in conjunction with or in substitution for the State, are matters so well settled as to be beyond the pale of argument, or it would so appear if the Supreme Court of the United States is still assumed to have power to construe and interpret the law.

See also Gutierres v. Albuquerque (188 U. S., 545), where a Territorial act for the appropriation of water on the public domain was upheld, the principal question being whether it was within the authority of the Territory to enact, it being conceded that a State would have such authority. (See also Wilby v. Decker, 73 Pac., 210 214). We quote:

"That while a stream is situated on the public lands of the United States, a person may, under the customs and laws of a State and the legislation of Congress, acquire by prior appropriation the right to use the waters thereof for mining, agricultural, and other beneficial purposes, and to construct and maintain ditches and reservoirs over and upon the public land, such right being good against all other private persons and by statute good as against the United States and its subsequent grantees."

The latest and one of the most conclusive and comprehensive cases is the case of Kansas v. Colorado (206 U. S., p. 46) (United States also a party by intervention). This case two States and the Federal Government being parties, and involving the main question here under consideration, is of peculiar significance. To fully illustrate, we quote as follows:

"The primary question is, of course, of national control, for if the Nation has a right to regulate the flow of the waters, we must inquire what it has done in the way of regulation. If it has done nothing the further question will then arise what are the respective rights of the two States in the absence of national regulation. Congress has, by virtue of the grant to it of power to regulate commerce 'among the several States,' extensive control over the highways, natural or artificial, upon which such commerce may be carried. It may prevent or remove obstructions in the natural waterways and preserve the navigability of those ways. In United States v. Rio Grande Irrigation Co. (174 U. S., 690), in which was considered the validity of the appropriation of the water of a stream by virtue of local legislation, so far as such appropriation affected the navigability of the stream, we said (p. 703)."

Quoting from the above case the court said in part as follows:

"'In other words, the jurisdiction of the General Government over interstate commerce and its natural highways vests in that Government the right to take all needed measures to preserve the navigability of the navigable water courses of the country even against any State action.'

"It follows from this that if in the present case the National Government was asserting as against either Kansas or Colorado that the appropriation for the purpose of irrigation of the waters of the Arkansas was affecting the navigability of the stream it would become our duty to determine the truth of the charge. But the Government makes no such contention. On the contrary, it distinctly asserts that the Arkansas River is not now and never was practically navigable beyond Fort Gibson, in the Indian Territory, and nowhere claims that any appropriation of the waters by Kansas or Colorado affects its navigability.

* * * * * * *

"We must look beyond section 8 for congressional authority over arid lands, and it is said to be found in the second paragraph of section 3 of Article IV, reading: 'The Congress shall have power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States; and nothing in this Constitution shall be so construed as to prejudice any claims of the United States or of any particular State.'

"The full scope of this paragraph has never been definitely settled. Primarily, at least, it is a grant of power to the United States of control over its property. That is implied by the words 'territory or other property.' It is true it has been referred to in some decisions as granting political and legislative control over the Territories as distinguished from the States of the Union. It is unnecessary in the present case to consider whether the language justifies this construction. Certainly we have no disposition to limit or qualify the expressions which have heretofore fallen from this court in respect thereto. But clearly it does not grant to Congress any legislative control over the States and must, so far as they are concerned, be limited to authority over the property belonging to the United States within their limits.

* * * * * * *

"We do not mean that its legislation can override State laws in respect to the general subject of reclamation. While arid lands are to be found, mainly if not only in the western and newer States, yet the powers of the National Government within the limits of those States are the same—no greater and no less than those within the limits of the original thirteen—and it would be strange if, in the absence of a definite grant of power, the National Government could enter the territory of the States along the Atlantic and legislate in respect to improving, by irrigation or otherwise, the lands within their borders.

* * * * * * *

"But it is useless to pursue the inquiry further in this direction. It is enough for the purposes of this case that each State has full jurisdiction over the lands within its borders, including the beds of streams and other waters. (Martin *v.* Waddell, 16 Pet., 367; Pollard *v.* Hagan, 3 How., 212; Goodtitle *v.* Kibbe, 9 How., 471; Barney *v.* Keokuk, 94 U. S., 324; St. Louis *v.* Myers, 113 U. S., 566; Packer *v.* Bird, 137 U. S., 661; Hardin *v.* Jordan, 140 U. S., 371; Kaukauna Water Power Co. *v.* Green Bay & Mississippi Canal Co., 142 U. S., 254; Shively *v.* Bowlby, 152 U. S., 1; Water Power Co. *v.* Water Commissioners, 168 U. S., 349; Kean *v.* Calumet Canal Co., 190 U. S., 452. In Barney *v.* Keokuk, supra."

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"Sitting, as it were, as an international, as well as a domestic tribunal, we apply Federal law, State law, and international law, as the exigencies of the particular case may demand.

"One cardinal rule, underlying all the relations of the States to each other, is that of equality of right. Each State stands on the same level with all the rest. It can impose its own legislation on no one of the others, and is bound to yield its own views to none."

See also Hudson Water Co. *v.* McCarter (209 U. S., 349). Opinion by Justice Holmes, holding broadly that one of the highest functions of a State is to protect its citizens in the full and complete use of its flowing waters, and their manifest beneficial uses. We quote:

"It sometimes is difficult to fix boundary stones between the private right of property and the police power when, as in the case at bar, we know of few decisions that are very much in point. But it is recognized that the State as quasi sovereign and representative of the interests of the public has a standing

in court to protect the atmosphere, the water and the forests within its territory, irrespective of the assent or dissent of the private owners of the land most immediately concerned. (Kansas *v.* Colorado, 185 U. S., 125, 141, 142; S. C., 206 U. S., 46, 99; Georgia *v.* Tennessee Copper Co., 206 U. S., 230, 238.) What it may protect by suit in this court from interference in the name of property outside of the State's jurisdiction, one would think that it could protect by statute from interference in the same name within. On this principle of public interest and the police power, and not merely as the inheritor of a royal prerogative, the State may make laws for the preservation of game, which seems a stronger case. (Greer *v.* Connecticut, 161 U. S., 519, 534.)

"The problems of irrigation have no place here. Leaving them on one side, it appears to us that few public interests are more obvious, indisputable, and independent of particular theory than the interest of the public of a State to maintain the rivers that are wholly within it substantially undiminished, except by such drafts upon them as the guardian of the public welfare may permit for the purpose of turning them to a more perfect use. This public interest is omnipresent wherever there is a State, and grows more pressing as population grows. It is fundamental, and we are of opinion that the private property of riparian proprietors can not be supposed to have deeper roots. Whether it be said that such an interest justifies the cutting down by statute without compensation, in the exercise of the police power, of what otherwise would be private rights of property, or that apart from statute those rights do not go to the height of what the defendant seeks to do, the result is the same. But we agree with the New Jersey courts and think it quite beyond any rational view of riparian rights that an agreement, of no matter what private owners, could sanction the diversion of an important stream outside the boundaries of the State in which it flows. The private right to appropriate is subject not only to the rights of lower owners, but to the initial limitation, that it may not substantially diminish one of the great foundations of public welfare and health."

The rights of New Jersey, therefore, in protecting its citizens in the free, uninterrupted, and beneficial use of its waters are unlimited and unimpaired and subject to no charges, taxes, restrictions, or terms, except such as it may itself impose.

If in public-land States this right was made subordinate to the following Federal powers, namely:

(*a*) To impose a charge in connection with the right of way measured by the water or its products;

(*b*) To withhold access to rights of way and use, except upon payment of what such "opportunity" is worth to divert, appropriate, and use it;

(*c*) Reserving in Federal officials power of inspection, supervision, and determination of disputed questions and fixing of charges, and also power to determine questions of monopoly proceedings in restraint of trade and police powers fully invested in the State;

(*d*) To permit uses of rights of way for beneficial uses (subject to be continued and compelled by mandamus under State authority) for limited periods only, at the end of which term the powers of the State and the rights of the owner would depend upon further governmental favor or departmental action, and beyond such term to be subject to further regulation, taxation, and limitations;

(*e*) To compel a transfer of the water right to the United States, presumably to invest it with control and authority and taxing and charging power, as a condition of "permitting" the State and its agencies to install and enjoy a public use in the State—

These considerations might be indefinitely multiplied, but with relation to any one would any lawyer say that the State affected and its citizens enjoyed and retained exactly the same rights, privileges, etc., "no more and no less" than those held and enjoyed "by every other State in the Union"?

STATEMENT OF MR. GEORGE A. SNOW, OF SALT LAKE CITY, UTAH.

Mr. SNOW. Mr. Chairman, I have no wish to undertake a detailed discussion of this bill since it has been so ably analyzed by others. Rather I only wish to make a few observations from the standpoint of the business man. My own business is that of taking something

here and there and by putting them together produce something that will be useful to mankind. This is in effect what those are doing who undertake the development of hydroelectric projects. Enterprises of this character are surrounded with more or less hazardous features, as is the case with most construction enterprises.

I object to this bill in pretty much its entirety, but chiefly for two reasons:

Lack of justice and lack of the practical, with special emphasis on the practical, as I believe the intent of the bill to be just. It seems to be predicated upon the theory that the people of a sovereign State are scarcely capable of looking out for themselves. I reside in the State of Utah, where we have no public-utilities commission, and the reason we have none is that thus far we have not felt the need of it. What Utah needs, along with other Western States, is not so much regulation but more development, more railroads, more constructive enterprises of various kinds, and as fast as they feel the need of regulation over these enterprises the States will provide them.

The companies with which I am identified have built four of these projects, and I feel, and I believe that the people of my State feel, that all of these projects have been fairly conducted, and nothing appears to have developed to call for regulatory measures either by the State or Government. On general principles I consider it a mistake to discourage individual initiative and business enterprises by unwarranted interference. It will be practically impossible to secure the investment of large sume of money in such enterprises as these unless they can be given encouragement and elasticity with as much freedom as possible from complications, and complications usually follows an attempt to regulate a large and important industry at long range, and particularly is this likely to prove true where that regulatory power is vested in the general Government, which by the very nature of things moves slowly.

I am inclined to favor some measure of fair and practical regulation as applied to enterprises of a public-utility nature, but this regulation must be characterized by open-handed dealing as between the investor or construction company and the public. Did this bill contemplate the Government granting permits for the construction of hydroelectric projects subject only to such reasonable regulations as should be prescribed by the States within which the projects were located it would appeal to me as being more fair and practical. The State would be familiar with the project and all conditions involved, and the people of the State being directly interested in the operation of the project and its success, it would seem that the State would be in a better position to apply any needed regulation; but to vest this power of regulation in the General Government impresses me as being impracticable, and I fear that we are getting rather too much of this sort of regulation into our daily business life.

Were I to build a hydroelectric plant on a stream where the General Government owned the land on which I wished to build the dam, and a competitor were to build a similar plant upon another stream, but located his dam on land acquired by private purchase, I might, under this bill, be placed at a sharp disadvantage in being subjected to a license tax, also a measure of regulation to which my competitor would not be subjected. Both equity and good business suggests, as

I view it, that both enterprises, if they are to be regulated at all, shall be given the same uniform regulation, and whatever that regulation may be the States should provide it. Those who invest money in construction enterprises are fairly entitled to generous protection. Some years ago I brought about the development of the large public-utility enterprise where I had a municipality to deal with and the question of regulation came up. My suggestion was that the municipality and we get down to business and figure out all the vital questions involved and carry into the franchise such protective features as would be fair to all; but I urged as being important, in order to interest capital, that all terms and conditions should, so far as possible, be agreed upon in advance. Negotiations were concluded upon this basis and we went ahead with the project. The money has been invested seven or eight years and as yet no adequate returns. We are still looking to the future. Had the municipality taken the position that if the project were built the municipality must regulate its operation, we would not have gone forward with the enterprise, involving as it does roundly $3,000,000 and furnishes employment to a great many men.

I thank you, Mr. Chairman.

STATEMENT OF HON. WILLIAM SPRY, GOVERNOR OF THE STATE OF UTAH.

Gov. SPRY. Mr. Chairman and gentlemen, it is not my purpose to take up an unnecessary amount of your time.

I have, however, given some consideration to this bill. I heartily agree with the men who have opposed the bill, because I do not think it is necessary. Even the intimation that a bill of that character is about to become law has already had a tendency to interfere with many projects that would otherwise have been put through in my State, and what we need out there is more of the public utilities. We want Mr. Snow to inaugurate other gas plants; we need other gentlemen who have brought their money there to build other power lines than those we now have.

It is true that we have not a public-utilities commission in the State of Utah, simply because we have had little use, if any, for a commission of that character.

Mr. Browning, of Ogden, Utah, was here before this committee last week. He has spent a very great deal of his own life in the establishment, in connection with his associates, of certain plants out there, but he informed me very frankly, after going over the provisions of this bill, that under no circumstances whatever would he care to invest 15 cents in any more power plants in the State of Utah if certain sections and requirements which are incorporated in this bill should become law.

There is a very dangerous attitude assumed, in my judgment, in connection with this bill, and that is the intimation which the bill carries through it—and I confess that the bill is ambiguous along those lines—that the Government itself has control over our water courses. We have been very jealous of our water in the West, in view of the fact that water is the life of the West, as you yourselves will readily recognize; that without it we would have had no building up of the West; and for that reason we have endeavored to very

materially safeguard our interests and our rights in the public waters of the States, believing at all times that that water should be put to the most beneficial use; and whenever any governmental power attempts to come in and make certain restrictions and provide for certain limits upon that thing which we prize so highly, we necessarily, not only in Utah, but in all those public-land States, look upon any provision going in that direction with a good deal of suspicion and alarm.

We have attempted in our legislative acts and all our administration of public affairs in Utah to safeguard our waters. We have required the Government of the United States, when it was desired to spread part of those waters over the land, to go to our State engineer's office, as any individual would be required to go, and make the same application, upon the same terms, governed and controlled by the same restrictions that the individual is governed by.

And I might say in passing, and in justice to the Government, that there has been no disposition on the part of the Government to override any of the regulations or requirements that we have made upon them. Not more than perhaps three years ago, when the former Secretary of the Interior was in Utah, and we had certain complications arising on the Uintah Reservation, where the Government had undertaken a project and had spent many hundreds of thousands of dollars in the building of canals, we found that their application was expiring, and served notice very frankly and plainly upon the Secretary that it would be necessary for him, through his officials out there, to secure an extension of that application so that he might be treated the same as an individual.

The application was extended at the request of the Secretary, of course, and we hope that there will be no friction whatever existing in the matter.

I merely mention these matters, Mr. Chairman, in order that you may appreciate the manner in which we view these situations.

I have a map here, which is published in a pamphlet, which shows the relationship between the Government-owned lands in the State of Utah and all other lands; and what is true of the State of Utah is true of every other public-land State. From this map it will be seen that our most productive country has to-day nearly 93 per cent of its lands still in Government ownership. So that, in the final estimate, we have a State there carrying all the burdens of an education which the State has enforced upon the people; carrying the burdens of the construction of goods roads and of all internal improvements in connection with the operation of every one of our State departments—and in that State not to exceed 30 per cent of our State lands that are bearing our overhead expenses.

Senator WORKS. How much of that land is actually reserved from entry?

Gov. SPRY. Possibly 60 per cent of it. There is over 70 per cent of that entire land that is now in the public domain.

So that our purpose—and when I say "our" I am speaking for the Western States—is, instead of retarding the investment of money in public utilities, to pursue such a policy as will invite that sort of investment, and as will serve notice upon the man who has money to invest that we will treat him fairly, and that we need the power development which his investment will bring.

Senator SMOOT. Before you leave the subject I will ask if that map was published in connection with an address which you delivered in Wisconsin?

Gov. SPRY. Yes; this map was part of a paper which I read at the conference of governors in Madison, Wis., about three weeks ago.

Senator SMOOT. Mr. Chairman, I ask that not only that address of Gov. Spry, but the map accompanying it, be inserted in the record of this hearing.

The CHAIRMAN. Without objection, they will be inserted.

(The material submitted by Gov. Spry is as follows:)

STATE CONTROL OF NATURAL RESOURCES.

[A paper delivered at the governors' conference, Madison, Wis., Nov. 11, 1914, by Gov. William Spry.]

Mr. Chairman, the consideration shown the West by this distinguished organization, in providing for a presentation and discussion of the western view of the natural resource question, is deeply appreciated. Involving, as conservation does, questions of public policy, questions of equity, and questions of consistency in governmental control and disposition of the public domain, it is a privilege to be afforded opportunity to discuss the subject with you, who, by reason of your familiarity with the practical operation of the national policies, past and present, are exceptionally qualified to consider, weigh, and determine the merits of the claims that we of the West are making regarding the latest policy of the Government as it relates to the handling of the remnant of the public domain of our Nation.

You are acquainted with the problems of financial management in the particular States over which you preside; you know concerning the social, industrial, educational, economic, and development problems that confront the States, and, therefore, are in a position, I take it, to grasp the significance and full meaning of the representations which we shall make to you. You have doubtless met some of the trying problems with which we are now grappling. Perhaps you have found them less difficult of solution because of your greater development and the larger financial resources at your command with which to meet them; but you have met those things, and, having met them, you will the more readily understand our position.

The voice of protest which has been raised in the West against the Federal attitude in the matter of forest, mineral, hydrocarbon, and power withdrawals, and the withholding of powers and functions in the control and management of the public domain that heretofore have been largely delegated to the respective States, has been severely criticized by the unthinking, who have been led into a blind, but none the less enthusiastic, support of a policy that appears to have been conceived in selfishness, and this earnest protest has been erroneously characterized as an effort to renew the old "State rights" question. Permit me at the outset to make it clear that I have no disposition to renew or even engage in a discussion of that subject. Our complaint is against apparent discrimination. The West protests against a most hurtful policy with respect to its public lands and appeals to the fair-minded in the older States to afford relief from the operation of a policy that is causing retardation in development, and which is being foisted upon it in the name of conservation.

I believe the governors of the public-land States, to a man, recognize and respect not only the right but the duty of the Congress of the United States to control and dispose of the public domain and the public resources held in trust for the several States in such manner as in its judgment will best promote the common welfare. I believe, also, these governors recognize that that management and control shall be exercised in accordance with the spirit of the Constitution and in strict accord with the provisions of the trust grants under which the National Government came into possession of much of its public domain; and, too, with at least a reasonable regard for conformity to policies and practices that, in the very nature of things, must be continued without marked deviation if we would maintain as sacred and binding the very fundamental principle of our Union—equality in the sisterhood of States. Further than that, I believe the governors of the public-land States stand shoulder to

shoulder in their demand that those sacred compacts between States and Nation, as set forth in the respective enabling acts, affirmed by the several State constitutions and sealed by the voice of the people in the various civil subdivisions, be kept in spirit and in letter, and not be subject to interpretation by bureau underlings whose rulings, if uniformly wrong, bear the striking characteristic of being uniformly against the States and in favor of the National Government. The agitation for legislation to sustain these bureau attachés in their arrogated powers is a move of portentious concern to the public-land States, and we are fearful that the campaign for the manufacture of conservation sentiment will result in measures that will work irreparable injury to our section of the country.

With that statement as a preface and with a firm belief that you are as deeply interested in the promotion of the common welfare as were those illustrious men who evolved and established and maintained for half a century our liberal public-land policies I shall, without any attempt at a discussion of the legal phases of this important subject, endeavor to present to you a few facts regarding the acquirement, control, and disposition of our public domain, a few facts regarding the present national attitude toward the remaining public lands and resources, and as many facts as possible in the short time at my disposal regarding the effect of this new attitude on the States containing the remnant of our public lands and resources.

The general Union of the States under the Articles of Confederation was difficult of consummation by reason of the conflicting claims to the vacant western territory. Demanding that all this territory should be surrendered and thrown into a common fund, certain States whose colonial charters gave them no rights in the vacant lands hesitated to join the Union, and Maryland went so far as to make the surrender of these lands by the landed States an indispensable condition of her accession to the Union. New York, in February, 1780, made the first concession in this regard by ceding her claims, and in the same year Congress made an earnest appeal to the States to follow the example, promising that the territory so relinquished should be disposed of for the common benefit and formed into republican States. Virginia complied with the request and Maryland ratified the Articles of Confederation in March, 1781. Georgia, however, did not relinquish title to her western lands until 20 years later.

Under the provisions of the Federal Constitution Congress was made sole authority in all matters relating to the lands of the Nation. These land possessions were greatly expanded in 1803 by the cession of Louisiana by the French. A little later possession was taken of western Florida, and in 1819 the entire territory of Florida was yielded by Spain. Twenty-five years later Texas entered the Union at its own petition. Then followed the acquisition of California and New Mexico by the treaty of 1848 after the War with Mexico. This acquisition of original Mexican territory was further enlarged by the Gadsden purchase of 1853, and in 1867 the lands of Alaska were ceded to the United States by Russia.

From a time antedating the adoption of the Articles of Confederation to the present day no matter of public concern has been more constantly before the American people than the question of disposing of the vast public domain of the United States. Various conditions had been attached to the cessions made by the several States, but all agreed in this one, namely, that the territory thus ceded should be a common fund for the joint benefit of the then and future members of the Union.

Around the national policy in the disposition of the public domain, acquired not only by cessions from the various States, but by succession to Great Britain and by purchase, discovery, and conquest, has waged a controversy that on the one side has found its supporters among those who maintained that the lands were an asset of the Nation to be disposed of for the purpose of producing revenue only, and on the other by those who were of the opinion that they should be held by the Government in trust only until a time when they could be released to the people for their use, which use contemplated occupation, cultivation, and improvement. Prior to the adoption of the Constitution, settlement on the public lands was not encouraged, it being thought that the sale of large parcels at auction would enrich the Treasury to an extent sufficient to liquidate the public debt. About a million and a quarter acres were disposed of in this manner prior to 1789. There was, however, at that time excuse for such a policy. The debts of the Revolution were a heavy burden upon the Government, and people had ceded their lands in trust for the purpose of paying

that debt. By statesmen who made a deep study of the cessions it has been asserted that many of the lands were turned over as a guaranty that the debts would be paid. These debts were cleared during the administration of President Jackson. The theory, however, that the public lands should be regarded as a source of revenue early met with strenuous opposition. Before the British House of Commons Sir Edmund Burke had contended that any policy which would induce a more extensive settlement of the soil would most greatly benefit the Government, and this doctrine was strongly urged by the minority in this country.

In 1790 Alexander Hamilton submitted a plan for the disposal of the public lands which embodied the fundamental principles of both colonial and present systems. In 1795 the present system of surveys was adopted in substance, and five years later Government sales at $2 per acre were authorized. Again, in 1800, this system was modified, and the credit feature introduced at that time led to overspeculation in lands, with the result that in excess of one quarter of the purchases made prior to 1820 were forfeited to the Government, and much distress was experienced by the settlers in the newly opened country in their efforts to comply with the purchase requirements. This law was repealed in 1820, and the price of lands again reduced to $1.25 per acre, with the further provision that all lands that failed of sale when offered at public auction could afterwards be purchased in unlimited quantity at that price.

More and more the utilization of the public domain in taking care of an ever-increasing immigration became a necessity, and stronger grew the sentiment that the land should be made easily available to the bona fide homeseeker. The long fight which was waged resulted in the preemption system, recognizing the settler above the speculator—a system which really found its origin in 1801, when Congress protected the settlers on lands which had been excluded from the original purchase made by Symmes, and continued to grow under the active support of President Jackson, Senator Benton, and others, until it developed into the preemption law of 1841, an act under which actual settlers enjoyed the right in preference to anyone else to purchase at a fixed price the lands on which they had settled, to an extent of 160 acres. With minor modifications the law continued in force until 1891, when it was repealed, after approximately 200,000,000 acres had been disposed of under its provisions.

One of the great champions of the policy through which the public lands were made easily available for the home seeker was Senator Thomas Hart Benton of Missouri, who towered as a national figure in promoting the interests of the West. Almost annually from 1824 till he saw his ideas in operation Benton presented bills for the sale of lands at fixed, graduated prices. Of him and his views on this subject ex-President Roosevelt, in his Life of Benton, has this to say:

"During Adams's term Benton began his fight for disposing of the public domain to actual settlers at a small cost. It was a move of enormous importance to the whole West, and Benton's long and sturdy contest for it and for the right of preemption entitle him to the greatest credit. He never gave up his struggle, although repulsed again and again, and at the best only partially successful, for he had to encounter much opposition, especially from the short-sighted selfishness of many of the northernsterners who wished to consider the public lands purely as a source of revenue. He bitterly opposed the then existing system of selling lands to the highest bidder—a most hurtful practice—and objected to the establishment of an arbitrary minimum price which practically kept all lands below a certain value out of the market. Altogether he assisted in establishing the preemption system and had the system of renting public mines, etc., abolished, and he struggled for the principle of giving the land outright to settlers in certain cases. As a whole, his theory of a liberal system of land distribution was undoubtedly the correct one, and he deserves the greatest credit for having pushed it as he did."

Continued advocacy of liberal policies in disposing of the public lands brought the question to the proportions of a national issue and resulted in the homestead bill of 1852, granting free homes to the landless settlers. Ten years later it was written into law and approved by President Lincoln after a previous veto by President Buchanan. This bill marked a radical change in the system that had prevailed for 80 years, during which time the public lands had been largely treated as a direct national asset for the purpose of acquiring revenue. Under the provisions of this bill they were to be granted to actual settlers who would occupy, improve, and cultivate them for a term of years and then receive a patent free of charge upon the payment of fees sufficient only to cover the costs

of survey and transfer of title. Three years after the adoption of this policy President Jackson, in his annual message, said:

"The homestead was established only after long and earnest resistance. Experience proves its wisdom. The lands in the hands of the industrious settlers whose labor creates wealth and contributes to the public resources are worth more to the United States than if they had been reserved as a solitude for future generations."

It was through the liberal land system of the National Government that the waste places of the vast public domain were gradually reclaimed and made to provide homes and prosperity to the great tide of immigrants that flowed to this country. It was by reason of the liberal land policies that great manufacturing and industrial enterprises sprang up; that populous commercial centers were established; that States grew in the power and prestige that goes with wealth and population; and the while the subduing and conquering influences of the home builder were reaching farther and farther westward. The growth of the remote Western Territories was so vigorous as to win for them, one by one, the coveted powers of statehood and admission into the Union on terms of equality with the older States. Shouldering in confidence the increased responsibilities that came with statehood these young members of the Union set about the business of State building, serene in the belief that the land and resource capital within their respective borders constituted an asset on which absolute reliance could be placed.

Remote from the thickly populated centers, these Western States waged a vigorous campaign of land and resource exploitation in an effort to put their capital on an earning basis. The soils were cleared and broken, and when turned and seeded yielded enormous crops; the mountains when penetrated revealed great deposits of the various minerals and hydrocarbons; the forests, on close examination, showed remarkable stands of choice timber; the mountain streams and rivers, when diverted to succor plant life, immediately became immensely valuable, and were found, after the advent of electricity, to be capable of producing almost limitless power for turning the wheels of the various branches of industry that were springing up. Altogether, the so-called desert and waste places of the North American Continent gave abundant evidence of being among nature's most favored localities, and spots where she had, with lavish hand, provided the valuable resources which, when converted to useful purposes, build up communities, States, and nations.

A halt was suddenly called to this growth and development. Uncertainty took the place of confidence and a condition of paralysis overtook the West. The mildest language that one can employ in mentioning the causes that led up to this change of national policy and resulting stagnation to Western resource development is that covetous eyes looked upon the heritage of the public-land States and there appeared in the land agitators with conservation on their lips—a high-sounding word that, while covering a multitude of meanings, none the less appealed to the American people as the word "thrift" would appeal to a Connecticut Yankee. Like cleverly worded advertising phrases, it "caught," and so it transpired that six years ago there was held, on the invitation of President Roosevelt, at the suggestion of the Inland Waterways Commission, in Washington, D. C., the first conservation congress.

Called ostensibly for the purpose of considering the proper use of the mineral, land, and water resources of the Nation, as matters of vital concern to all the people of the United States, it was assumed that discussions would be confined to waste prevention measures, and that through the interchange of ideas there would be evolved a wise policy of foresight in the administration of the public domain—a policy which in its practical operation would have in view the needs of the future while adequately meeting the demands and necessities of the present. The conference, however, developed into a spectacular, wordy exploitation of alleged facts regarding the exhaustion of the natural resources. The moderate expressions of fear that wanton waste would work a hardship on future generations, that were employed to attract men of prominence to the councils of the conference, were relegated by a self-appointed coterie of resource guardians, who, supported by extravagant statements regarding the depletion of the land, timber, mineral, coal, and power resources of the country, raised a hue and cry that brought the startled Nation abruptly to the very brink of a yawning chasm of resource famine. Statistics were presented, and at the time undisputed, to prove that in a very short time the vast mountain ranges would be stripped of ore, that the iron age would be a thing of the past, that people would actually suffer from cold for want of coal, that the mediums of exchange would

have to be abolished—in short, that the great American Republic, rich as it was popularly supposed to be, would soon face a veritable bankruptcy of public resource.

State executives departed from this first conservation congress with the understanding that the several States would have influence, if not voice, in shaping a new and wiser policy of public-land administration. Subsequent developments have proven, however, that the forces behind this movement had no such idea. The deliberations and conclusions of succeeding conferences have been more and more dominated by Government officials and bureaus. In the meantime the continued cry of resource famine has made its impression on Congress, as reflected in the measures extending the powers of the President in land, mineral, timber, oil, and power withdrawals; and the Presidents, on ill-advised recommendations based on hasty field examinations, have exercised their authority in extensive withdrawals that are most seriously retarding development in the very sections of the country that stand most in need of the vestment of the public domain in the hands of the home builder and those who are willing to develop it on the most liberal terms.

It is objection to this new policy of resource administration, the outgrowth of the conservation movement, that has been termed a renewal of the old State rights question—a characterization of our protest decidedly unfair and calculated to prejudice our position in the minds of many who would look with disfavor on the revival of that disagreeable controversy. As to our view on the subject: With the fact firmly established that States are admitted into the Union on terms of equality, consider that the Nation has operated for many years under a liberal policy in the disposal of its lands; that the liberal land system has been fundamentally responsible for the growth, development, and wealth of the great centers of the East; that an empire within an empire—the great empire of the West—is retarded on the threshold of an era of development that from all indications will eclipse the wonderful growth of the East; that the sale of agricultural land was primarily responsible for the increase in population in the East; that the development of the mineral and coal resources added to the wealth of the East; and that the use of all the bounteous gifts of nature made the East what it is to-day.

Because of the extravagant representations heretofore mentioned, the former liberal policy of the Government has been materially curtailed, vast areas have been withdrawn from entry, new and radical departures in the regulations governing the handling of mineral and oil lands have been adopted, and the cry is going up for Government ownership of all power sites. Under this policy the States wherein the public domain as yet lies practically in its virgin state are deprived of that benefit that accrued as a direct asset to the older States through the disposal of the public domain and utilization of the public resources thereon. It is obvious that the development which came to the older States through the vestment of the land in individuals will be deprived the younger and less developed States, and that while the greatest direct benefit of the former liberal policy accrued to the individual States wherein sales were made, the direct benefits, not only from the sale but from the development of the public lands in the Western States, under the proposed policy will go to all the States of the Union, being distributed as a common fund, which common fund in the past has rarely been appropriated by Congress for internal improvements in the West.

Suppose the Government leases its mineral, coal, and oil lands and water-power sites and remains forever vested of title. Who can estimate the loss in revenue from taxation that will be suffered by the States wherein these valuable resources are located, which revenues have for years been accruing to the older States and will continue forever to accrue because their resources have been vested in private ownership and are subject to taxation by the States—a thing which it appears will be utterly impossible under the leasing system so long as the Government holds title, since Government lands can not under the Constitution be subjected to taxation?

This phase of the leasing system alone condemns it as a policy in absolute violation of the spirit of equality of rights in the public domain. A material factor in the growth and development of a State is the distribution of the burden of taxation. Take from the State its right to tax mining claims, the mineral and oil output, the coal product, and the power sites within its boundaries and you rob the Commonwealth of a revenue that has been a source of ever increasing income to the older States, and increase rather than diminish the tax burden the freeholder is already called upon to bear. This

indeed, is a most serious matter to the public-land States. Take, for instance, the State I represent. Utah, with on area of 54,380,000 acres, has but from ten to twelve millions of acres invested ownership or process of transfer, and much of that consists of grazing lands that yield but slight income through taxation, and, according to the records of the United States Land Office, there stood of record in Government ownership, as of November 1 this year, over 72 per cent of the entire area of Utah. If our sources of revenue for local self-government were adequate to the increasing demands, or if our revenue were in excess of our needs and we were squandering the income, I grant this national curtailment of State development through land withdrawals would not be so serious, but it is a fact that additional land ownership, with improvements, more extensive mining operations, greater power development, and all those activities that make for a prosperous community are imperative necessities in Utah to keep abreast the expense of maintaining schools, State government, State institutions, and carrying on internal improvements. During the biennial period 1913–14 Utah will expend for purely educational purposes approximately 88 per cent of its entire State revenue from taxation, and when I tell you that in arriving at that percentage public utilities, net proceeds of mines, and all assessments made by the State board of equalization are included with the taxes levied on real estate, personal property, improvements, and all other taxable possessions you will realize that we are devoting our income to worthy objects. You will realize also that we are facing a very serious problem and our need for a continuation of those policies which have been the most potent factors in the development of our sister States is a great one. It is not so much a question as to whether National or State Governments shall control the lands and resources as it is an absolute necessity that the lands and resources be placed in the hands of industrious settlers who will develop them, thereby adding to the material welfare of the States in which they lie and the greatness of the Nation of which the States are a part.

It is but a short step from the mineral-leasing system to the leasing of agricultural lands. If it is proper that the sturdy pioneer prospector who stakes it all on a chance that he will add to the mineral production of the country; the man who invests his money, his talents, his energy, the sweat of his brow in delving after the mineral deposits of the Nation and who, after the expenditure of his means finds a "pay streak," installs machinery, opens up a vein of ore which, but for his persistence would have remained hidden for centuries, perhaps, must turn over to the Federal Government what he has found, and if he will continue to develop it he must do so as a lessee, why should not the same policy be proper in handling the agricultural lands? Why not let the homesteader select a piece of raw land which he regards as a possible producer of agricultural products, clear it of sagebrush, plow and seed it, and, if in the arid section of the United States let him, at his own expense, acquire and deliver to that land the water which is necessary to produce the crop, and then, if the experiment be a success and he secure a harvest, let him become a lessee of the Federal Government and work his land not as an independent freeholder but as a tenant of the National Government, which becomes his landlord? How long, can you tell me, will we be compelled to wait on the National Government to put the agricutural, mineral, oil, and coal lands in a condition for tenancy? Aside from this, landlordism has ever been autocratic, overbearing, while tenantry has developed people who lack in the two most necessary qualities of American citizenship—loyalty and patriotism. In Utah we have been building our State by urging the people to own their homes, to own their places of business, and to own the business in which they are engaged, and it is the only policy that will make for that kind of citizenship which will perpetuate the American form of government. Tenantry is repugnant to the ideals of American citizenship.

You will agree, I think, that there are two distinct views of the conservation question—the one, which, unfortunately, has been the official view—narrow, selfish, looking altogether to the welfare of generations yet unborn, totally ignoring obligations of trusteeship and brushing precedent aside so ruthlessly as to render experience an invaluable thing, and calculated to enrich the General Treasury at the expense of the younger and financially weaker States. The other the view of those who recognize a tendency toward extravagance in the improvident drafts on the natural resources and who, recognizing the evil, have a sincere desire and determination to avoid waste but continue development.

In the beginning, we are informed by Holy Writ, after creating the heavens and the earth and all that in them is, God created man and gave him dominion over the fishes of the sea, the fowls of the air, and the beasts of the field, and bade him use all things created. That dominion man has always held and exercised, and in so doing has been compelled to draw upon the resources largely in accordance with the day and generation in which he lived. Up through the various stages of civilization man has been compelled to gain his living by the use of the things over which God gave him dominion, and so long as civilization endures, so long, indeed, as intelligent beings exist, man must continue to live through some method of utilizing the resources about him, and the success of his struggle for survival and advancement will be measured by his ability to understand and make those resources useful to his purposes with least extravagance and loss.

The one important consideration in connection with the handling of our resources, overlooked by the conservationist, is the fact that primitive man made but primitive drafts upon the resources which he found most easily available and convertible, and just so long as those drafts were primitive, man remained primitive; when modern man made modern requisition on nature's storehouses civilization had attained a much higher perfection.

When men lived in mounds and caves, the forests were slightly disturbed, and civilization was not very far advanced; when they rubbed sticks to make a fire, sulphur was not being exhausted; when they paddled in canoes and traveled overland by horseback, our steel deposits were aging in the everlasting hills; when men went whaling for blubber to make candles electricity was unknown and this powerful and subtle force was a mystery of the elements; when men gathered a few sticks of driftwood to cook their meals, the coal deposits were unmolested; when scribes were a rarity, if not a novelty, and historians carved hieroglyphics in stone, wood pulp was not even in demand; and when men were content to merely exist, the demands that manufacture, trade, and commerce have made upon our natural resources were not even dreamed of.

Look conservation squarely in the face and answer, would you exchange the modern home with its accessories and comforts, made possible through the use of the natural resources, for the dugout of the man who made his home in the mound or the habitation of the cliff dweller? Would you exchange your sulphur match for the wooden stick or flint of days gone by? Would you barter your electric lamp for the candle made from the blubber of whale? Would you give up your modern sea vessel or twentieth century steel train, your automobile, for the canoe of your forefathers, the horse of the mail carrier or the "one-hoss shay" of your ancestors? Would you give up your newspapers, your magazines, your libraries, your textbooks, for the tablets of stone? Would you silence the busy machinery of manufacture, would you stop the wheels of commerce to go back to the life of a century ago? Would you exchange all or any of those accessories of modern civilization for every atom of natural resource that entered into their making?

Would any one of you, having at heart, first, the true interests of your country; second, the welfare of the State you represent; and, third, the well-being of your fellow men, exchange 100 families, who were willing to temporarily forego the comforts of life and locate on the public domain, for the sacred purpose of home building, uproot the sage and greasewood, drive the plow into the parched earth, conserve the sunshine, the rain, the snow; make the land fruitful and pleasing to look upon where before it was a barren and dreary waste; drive the lean and hungry coyote one ridge farther back toward the fastness of the mountains; would you exchange 100 State builders for a forest reserve, with a small stand of timber, a vast area of sagebrush, and a forlorn hope that seeds from Germany will produce timber for the use of generations yet unborn?

In his message to Congress December 4, 1832, President Andrew Jackson said:

"It can not be doubted that the speedy settlement of these (public) lands constitutes the true and best interest of the Republic. The wealth and strength of the country are its population, and the best part of the population are the cultivators of the soil. Independent farmers are everywhere the basis of society and true friends of liberty.

"In addition to these considerations questions have already arisen and may be expected hereafter to grow out of the public lands which involve the rights of the new States and the powers of the General Government, and unless a

liberal policy be now adopted there is danger that these questions may speedily assume importance not now generally anticipated. The influence of a great sectional interest when brought into full action will be more dangerous to the harmony and unison of the States than any other cause of discontent, and it is the part of wisdom and sound policy to foresee its approaches and endeavor, if possible, to counteract them.

"It seems to me to be our true policy that the public lands shall cease as soon as practicable to be a source of revenue and that they be sold to settlers in limited parcels at a price barely sufficient to reimburse the United States the expenses of the present system and costs arising in our Indian compacts. The advantages of accurate surveys and undoubted titles now secured to purchasers seem to forbid the abolition of the present system, because none can be substituted which will more perfectly accomplish these important ends. It is desirable, however, that in time this machinery be withdrawn from the States and the right of sale and the future disposition of it surrendered to the States respectively in which it lies.

"The adventurous and hardy population of the West, besides contributing their equal share of taxation under our impost system, have in the progress of our Government, for the lands they occupy, paid into the Treasury a large portion of $40,000,000, and of the revenue received therefrom but a small part has been expended amongst them. When, to the disadvantage of their situation in this respect, we add the consideration that it is their labor alone which gives us real value to the lands and that the proceeds arising from their sale are distributed generally among the States which had not originally any claims to them, and which have enjoyed the undivided emoluments arising from the sale of their own lands, it can not be expected that the new States will remain longer content with the present policy for the payment of the public debt. To avert the consequences which may be apprehended from this cause, to put an end forever to all partial and interested legislation on the subject, and to afford to every American citizen of enterprise the opportunity of securing an independent freehold, it seems to me therefore best to abandon the idea of raising the future revenue out of the public lands."

In the United States and Alaska there is a total area of 2,315,310,728 acres, including a water surface of 34,000,000 acres. The great bulk of this area was at one time or another a part of the public domain. It is not only interesting as a matter of history, but imperative as a matter of information, if we would pass intelligent judgment on the present public-land question, to ascertain how this immense estate has been divided and distributed.

Eighteen States—Connecticut, Delaware, Georgia, Kentucky, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, South Carolina, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, and West Virginia—retained exclusive jurisdiction to all the lands within their respective borders, and Texas, on admission to the Union, did likewise. All told, those States reserved jurisdiction to 473,712,320 acres (including the District of Columbia), or 20.47 per cent of the entire area of the United States. In the 18 States of Alabama, Arkansas, Florida, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, and Wisconsin are 701,383,480 acres, or 30.04 per cent of the total area of the United States. On June 30, 1913, according to the report of the Commissioner of the General Land Office, these States contained but 7,914,929 acres of unappropriated and unreserved public lands. In the 11 remaining States—Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming—commonly called the public-land States—there is a total area of 761,044,620 acres, or 32.88 per cent of the total area of the United States, of which 290,016,757 acres, or 38 per cent, was unappropriated and unreserved June 30, 1913. The Government reservations at that time within these States approximated 191,797,151 acres, so that about 63.3 per cent of the total area of these States is still awaiting settlement. The remaining 10.63 per cent of the total area is in the Territory of Alaska, which embraces 378,165,760 acres.

In pursuance of the national policy regarding reservations out of the public domain of such parcels of the public land as may be necessary for the common defense or the general welfare, or in other words, such as are required to be appropriated for national uses immediate and expectant, Congress has established from time to time military and naval reservations, Indian reservations, and lighthouse reserves, and in addition, in furtherance of the conservation idea, has established parks, national mounments, and forest reservations. While

these are intended primarily for the benefit of the whole of the United States, it is interesting to note their location.

United States Indian reservations, according to the latest available figures, June 30, 1912, embraced 38,903,388 acres, of which 32,752,630, or 84.2 per cent, were in the 11 public-land States.

The total area of national forest reserves, June 30, 1913 (exclusive of Alaska, 26,748,850, and inclusive of Porto Rico), was 159,867,798 acres. Of this 152,945,148 acres, or 95.67 per cent, were in the 11 public-land States.

On June 30, 1913, there were 28 national monuments in the United States and Alaska, embracing 1,508,627 acres. All but 1,337 acres were in the public-land States.

The national parks have an area of 4,606,153 acres. The public-land States contain 97 per cent of this area, or all but 13,061 acres, and the Secretary of the Interior, in 1910, urged that the four parks embracing this area be ceded to the States wherein they respectively lie.

These reservations total an area of 204,885,967 acres, exclusive of Alaska, and 93 per cent, or 191,797,151 acres, are in the public-land States of the West.

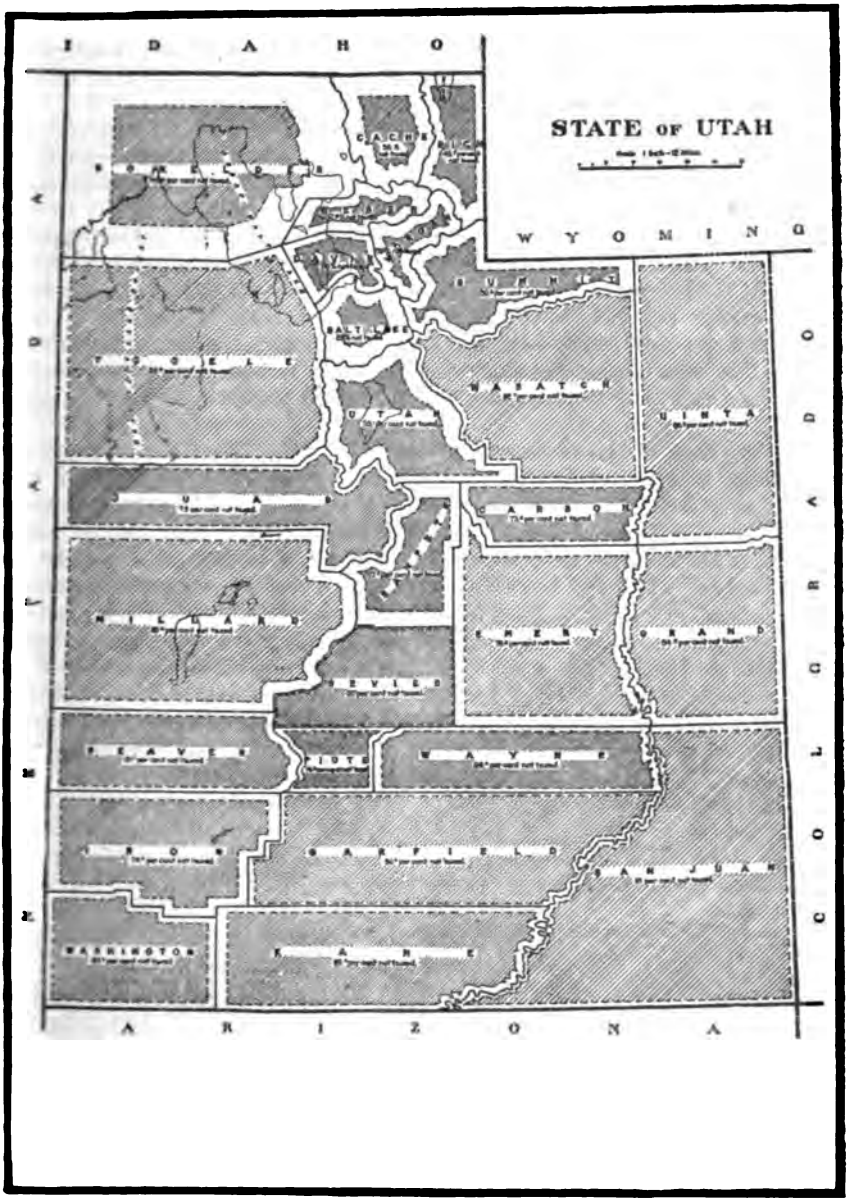
Now, gentlemen, one skyscraper in a desert does not make a city, nor do a number of office buildings. A city grows by reason of the fact that the country surrounding it is owned and farmed; because it is furnishing lumber, because it is producing ore, or because the river on which it is located accommodates commerce or produces power. One city does not make a commonwealth. It takes many cities with many farming, stock-raising, and mining communities to make a State, and a State becomes great only as population increases and enterprises are developed. One State does not make a nation, and the seat of government and the great commercial centers are what they are only by reason of what is back of them. And that something back of them is the constructive and development force that supplies the arteries of the nation and makes it great. It is the pride of every American that this great Nation occupies its present high position among the countries of the world, and it should be the individual responsibility of every citizen to see to it that in the future the United States shall hold none but first place among the nations. That position can be maintained only through unceasing activity in development. It matters not in what section of the country our enterprises are curtailed through the operation of laws or policies of the National Government, the moment stagnation overtakes development and enterprise any place in this broad land, the curtailment is disastrous to the immediate locality and will surely be reflected in national shrinkage.

The natural resources within the given boundaries of a State, whether vested in private, State, or Federal ownership, constitute the capital upon which that particular State must conduct its business and that capital should not be impaired by stagnation. The business of the Government and the business of the States is being properly conducted only when the public lands go to the bona fide homeseeker, when the minerals are being converted into wealth, when the waters are being used for navigation, irrigation, and power, and when the timber is being cut to build homes, schoolhouses, and public buildings. And the capital of the Nation and the State and the individual is being most seriously impaired when the employment of these great natural resources whose use creates life and prosperity is so restricted as to prevent their free and unlimited development.

If we can not utilize our resources to produce valuable results, then we are poor indeed, since poverty is the lack of property and adequate means of support. Our plea is an appeal for opportunity to make useful and profitable the great resources at our doors. We need and must have them, and, as I have before stated, the question of who shall control and dispose of them is a matter of minor importance compared with the need that they be placed in the hands of those who will develop them; and the necessity that transfers be made without the red tape and uncertainty that characterizes such conveyances as are now made of the public lands. When State selections are clear listed to the States and the States in good faith enter into contracts of sale with bona fide purchasers, it is but reasonable to demand that the National Government, which through its field experts has examined and classified the lands, permit titles to pass without involving purchasers in expensive litigation and without placing the States in a position where they can not live up to their contracts.

That is what we are experiencing in Utah to-day. Aside from the fact that a great percentage of our lands have been withdrawn from entry, the titles

to many of our school sections which we attempt to sell are clouded by arbitrary department rulings and local land-office decisions to such an extent that people hesitate to enter into contracts for their purchase; and all this in violation of the land grants under the enabling act of the State.



Map showing the percentage of untaxed areas in the various counties of the State of Utah as of November 1, 1914.

The West solicits no sympathy, asks no favors, pleads for no advantages, but demands consistency and fair play and equal opportunity with her sister States in handling her resources.

Gov. SPRY. I may say that the information contained in that pamphlet was taken from the Government land office at Salt Lake City as late as November 1 of this year.

We need more power in the State of Utah, for the reason that we have in the experiments that we have made during the last few years discovered that we had certain subterranean waters which if brought to the surface could be made available and of very much value to the people who are attempting to reclaim these desert lands.

A short time ago an engineer told me that if certain restrictions could be avoided, and if they were allowed a more or less free hand, subject, however, at all times to such control and regulation as may be provided by the State, he himself would be only too glad to see to it that money in amounts from $5,000,000 to $10,000,000 annually should be placed out there for the development of certain powers that will enable us to bring those subterranean waters to the surface and so enable our people to build homes upon that 70 per cent of the lands that are now lying idle and utterly worthless, absolutely worthless, so far as earning capacity to the State is concerned and so far as private means by which the people could make a living are concerned.

We feel that if the Government of the United States could see its way clear to a more favorable attitude toward the West, and not hedge us around with the restrictions with which we are hedged around at the present time, not only as relates to our power sites but our other natural resources, it would be of inestimable benefit to those States. And for the life of me I can not see why the Government should attempt to interfere in the matter of power sites when the lands upon which those sites are erected are perhaps utterly worthless for any other use. As a rule our power sites are built in our canyons, surrounded by barren rocks, and by land that is utterly worthless for any other purpose that we know of at the present time; you can not plow them; you can not irrigate them; you can not grow trees upon them; you can not grow grain upon them; you can not even build your homes upon them. You frequently find those power plants, as those who are familiar with the work will readily recognize, in the most inaccessible places, owing to the fact that they must be in close contact with the water that would be found in just such localities.

So that, in view of the fact that the Government itself conceding its right to the public lands, finds those power sites in desolate and God-forsaken places, I do not see why they should attempt to match their ownership in such practically worthless lands against our ownership of the water which means so much for the development of that western country.

We are perfectly willing to cooperate with the Government, however, along proper lines, and upon a fair basis. But it occurred to me that, instead of the Government attempting to regulate our affairs along this line, it ought to be the right of the State to say to the Government just how far it should go in the handling of that land which for other purposes is practically valueless. The situation should be reversed.

It is development we are asking for; we are carrying a tremendous burden in relation to our schools. As a matter of fact, out of the

entire income from taxation in the State of Utah we are to-day paying upward of 88 per cent for the education of the boys and the girls of that State; so that we are naturally going after investments. We want the men who will put their money into the development of our resources, whether those resources consist of power, or of gold, or precious minerals, or salt, or whatever they may be—we want those people to know that our arms are open to those who have confidence enough in our legislation and the fairness of our laws, to come to us and invest their money with an assurance of a fair return; so that our people, and the people from your State, and from every other State in the Union, may find that after all it is worth while to come out there and locate in that mountain State because of the superiority that to-day exists there over many of the other States. And for that reason we want to be left alone.

There is a great deal of ambiguity in connection with the bill. For instance, the bill itself speaks of certain lands of the United States "and other property." Now, I do not know, and would like to ask for information as to that, just what is referred to when the bill speaks of "other property" belonging to the United States, other than the lands which they own and which are referred to in the bill. I say this ambiguity exists, and, as Judge Short has very ably set forth, it throws the bill open to every private construction; and I can see nothing but endless litigation, because men in attempting to assert their rights might be forced into courts to prove those rights. And for that reason, if some other measure could be adopted by which the rights of those public-land States could be conserved; by which those States could be placed upon a par with every other State; by which a treatment of the public-land question can be considered as the treatment of the public-land questions in every other State has been considered—it seems to be those intermountain States should be entitled to that same consideration and that same fairness that has existed on the part of the Government in former years, and which other States have been permitted to enjoy.

I simply wanted to make this statement, Mr. Chairman and gentlemen, in order that you might know that the public-land States of the West object, in all fairness and in all kindness, but nevertheless they do object, to any undue intereference that might be attempted on the part of the Government. We feel that we are capable of handling our own affairs, looking always to the general development of the country, the making it possible for money to be expended there so as to assist us in work that we have undertaken out there, and that we are attempting to do every day of our lives; so that, together with our friends who might come in from other communities, we might cooperate together to make of that western country what it can be made and what it, by right, ought to be.

I do not know that I care to say anything further, Mr. Chairman, and I thank you for the opportunity of making this little statement.

The CHAIRMAN. We thank you, Gov. Spry.

(Thereupon, at 4.05 o'clock p. m., the committee adjourned until Tuesday, December 22, 1914, at 10 o'clock a. m.)

WATER-POWER BILL.

TUESDAY, DECEMBER 22, 1914.

UNITED STATES SENATE,
COMMITTEE ON PUBLIC LANDS,
Washington, D. C.

The committee assembled at 10 o'clock a. m.

Present: Senators Myers (chairman), Robinson, Smoot, Clark, Works, Norris, and Sterling.

STATEMENT OF MR. O. C. MERRILL, CHIEF ENGINEER, FOREST SERVICE, DEPARTMENT OF AGRICULTURE.

Mr. MERRILL. Mr. Chairman and gentlemen, I wish to speak briefly, in beginning my remarks, about the total amount of water power in the United States. You have had figures given here of the amount of total power in the United States. There is a great deal of difference in the estimates which have been presented, depending upon whether the figures are based upon a probable present commercial development, or upon an ultimate development some time in the future under conditions that no one can foresee.

For that reason the figures given have varied all the way from about 20,000,000 or 30,000,000 up to somewhere about 200,000,000 horsepower.

The figures which I have used hitherto, and which I think are conservative on the information at present available under present operating conditions, and assuming that markets could be found, are 28,000,000 horsepower for the entire United States, divided between the several sections of the country as follows:

North Atlantic States, 2,200,000 horsepower.
South Atlantic States, 2,300,000 horsepower.
North Central States, 1,700,000 horsepower.
South Central States, 1,500,000 horsepower.
Western States, 20,400,000 horsepower.
Total for the United States, 28,100,000 horsepower.

Senator CLARK. I do not like to interrupt you, but this is a matter of figures on which we want to be as accurate as possible. What sources of information have you available from which you make your estimates?

Mr. MERRILL. I have taken largely the information obtained by the Geological Survey in making up those estimates.

Senator CLARK. Well, let me ask you this question: Do you know how extensively the Geological Survey has conducted its measurements as to all the streams in the country?

Mr. MERRILL. It has not made them extending all over the country, and that is why I say that any estimates must be taken with the idea that they are very approximate.

Senator CLARK. And you have taken this data from the actual inspections that the Geological Survey has made, have you?

Mr. MERRILL. The Geological Survey made its estimates from the data it had available; that is the case, at least, as far as I understand.

Senator CLARK. Well, did it make its estimates as to any stream upon which it did not have the data?

Mr. MERRILL. As I understand it, this is the way the estimates have been made up: The Geological Survey has gauged the streams all over the country; it has been doing that work for many years. The streams have been divided into sections by the use of topographic maps and not surveys on the land; the amount of flow at the head of each section of the stream has been ascertained or estimated, and the drop through the section; and the power estimates have been made without any consideration of the question whether in that particular section there is a commercial development or not——

Senator CLARK. Do you understand that the Geological Survey has measured the flow of all the streams?

Mr. MERRILL. I do not.

Senator CLARK. Then when you give this estimate it is from rather incomplete data, is it not?

Mr. MERRILL. It is incomplete; there is no question about that. I have had, however, pretty close information on the subject with respect to the State of California; and I revised the survey estimate in cooperation with one of the engineers of the Pacific Gas & Electric Co. on the basis of the amount of power available under present conditions. I then reduced the figures of the Geological Survey for other sections of the country in the same proportion. They are very approximate; there is no getting around that.

Senator WORKS. Well, has the Geological Survey measured all the streams in California?

Mr. MERRILL. No; they have not.

The census of 1912 of developed water powers in the United States gives the following figures:

South Central States, 58,000.

Western States, 1,602,000.

These figures show that the largest proportion by far of the undeveloped water power of the United States is in the Western States; and that the section which has most nearly reached complete development of its water powers is the North Atlantic States.

Senator WORKS. Have you that information in tabular form?

Mr. MERRILL. Yes, sir; I have it in tabular form.

Senator WORKS. It will be much more convenient for the committee to refer to it in that way.

Mr. MERRILL. I will submit that for the record.

(The statement referred to is as follows:)

Water power in the United States.

Section.	Total horsepower.	Per cent of total.	Developed water power, 1912.	Developed per cent of available power.
North Atlantic States	2,200,000	7.9	1,348,000	60
South Atlantic States	2,300,000	8.2	469,000	20
North Central States	1,700,000	6.0	837,000	50
South Central States	1,500,000	5.3	58,000	4
Western States	20,400,000	72.6	1,602,000	8
Total	28,100,000	100.0	4,314,000	15

Mr. MERRILL. In States containing national forests (which includes all the Western States together with Arkansas, Minnesota, and South Dakota) there is a total of 20,800,000 horsepower, or a total of 74 per cent of all within the United States.

The estimated total within the national forests is 11,700,000 horsepower, or 56 per cent of that within the above group and 42 per cent of the total within the United States.

The figures I have just presented are significant in connection with certain general statements that have been made—I do not know whether they have been made before the committee, but they have been made elsewhere—that if we could develop by water all the power that is being used in the United States, we could make an enormous saving in coal. Such a statement would be true, provided the water powers were in a position where they could be used.

There probably is not enough water power on the Atlantic coast unless possibly in the Southern States to supply the present market if every horsepower was developed, and it would not be possible, under any conditions that we can foresee in the immediate future, to transmit the power developed in the Western States to supply the Atlantic seaboard.

It seems to me, therefore, that the question resolves itself rather into whether, under the conditions as they exist now, each of the sections—and particularly the western section, because that is the one with which we are concerned—has a sufficient amount of power developed to meet its market conditions.

Now, I have here a map [indicating] of the State of California, showing the hydroelectric transmission lines in that State, to illustrate conditions in one of the Western States.

These lines [indicating on map] are the transmission lines of the several power companies operating in that State. These lines [indicating] in red are the Pacific Gas & Electric Co.'s lines, covering all that section of the State. This green line [indicating] is the Great Western Power Co. This yellow line is the Sierra & San Francisco Power Co., which supplies the San Francisco street railways.

Senator WORKS. All of those lead in to San Francisco, do they?

Mr. MERRILL. Yes. This line [indicating] is the new transmission line of the Pacific Light & Power Corporation, running from the

San Juaquin River into Los Angeles and the vicinity. This short line [indicating] is the California Edison line; and this green [indicating], extending from the Owens Valley [indicating] clear down to the Mexican border, is the California-Nevada Power Co. This transmisison, I believe, will be the longest in the world when it is completed.

Senator WORKS. That is not completed now, is it?

Mr. MERRILL. I think it is completed now; if not, it will be completed soon.

Senator WORKS. Does that lead into San Diego?

Mr. MERRILL. No; not San Diego, but off into the Imperial Valley.

Now, I have prepared a tabulation here which I will show to the members of the committee [handing around paper]. This shows the installation of these several California power companies, the average output, and the relation between that output and the installation.

According to this tabulation, which is brought up to December 31, 1913, the total developed water power in California is 559,000 horsepower.

Of steam installation, mainly for auxiliary service, there is a total of 356,000 horsepower; making a total of steam and hydroelectric power of 915,000 horsepower, or nearly a million horsepower.

The ratio in California, for the year 1913, between the amount of power turned out and the maximum demand was 56 per cent, while the ratio between amount of power turned out and the installations was but 33 per cent. This means that if the plants could have been operated all the time at full load, only 33 per cent of the installation would have been necessary. They are not operating under such conditions, however, because the peak capacity that must be provided is approximately twice the average use.

The final figures in this tabulation show that there is installed in California to-day nearly twice as much installation as will carry the peak load; that is, 44 per cent of the installed capacity in hydroelectric and steam power in the State of California in the year 1913 was idle.

Senator CLARK. What percentage of that was steam and what percentage water produced power?

Mr. MERRILL. The steam was a little more than half the water. Now, of course, you can not run a hydroelectric system with just your peak capacity; there must be some margin.

I would like to insert this tabulation showing installation and output statistics of California companies in the record at this point.

(The statement referred to is as follows:)

Installation and output statistics for hydroelectric companies of California, 1913.

Company.	Installation (kva.).			Average annual output (kw.).			Maximum demand (kw.), total.	Annual load factor (per cent), total.	Capacity load factor (per cent).			Utilization factor (per cent), total.
	Hydro.	Steam.	Total.	Hydro.	Steam.	Total.			Hydro.	Steam.	Total.	
California-Oregon Power Co.	9,650	.....	9,650	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Western States Gas & Electric Co., Stockton system	3,000	2,250	5,250	2,456	104	2,560	2,920	88	82	46	49	56
Western States Gas & Electric Co., Eureka system	1,500	3,050	4,550	416	222	638	1,595	40	28	73	14	35
Pacific Gas & Electric Co.	92,370	70,200	162,570	27,272	18,683	45,955	[2] 77,900	[2] 59	30	27	28	[2] 47
Northern California Power Co., consolidated	34,350	.....	34,350	16,378	.....	16,378	[1]	[1]	48	.....	48	[1]
Sierra & San Francisco Power Co. and Coast Valleys Gas & Electric Co.	37,375	19,000	56,375	[1]	[1]	19,437	[1]	[1]	[1]	[1]	35	[1]
Great Western Power Co.[3]	40,800	30,500	71,300	29,857	2,406	32,263	51,800	62	[1]	[1]	45	73
Oro Electric Corporation	3,000	1,000	4,000	1,559	91	1,650	[1]	[1]	52	9	41	[1]
Snow Mountain Water & Power Co.	6,500	.....	6,500	2,956	.....	2,956	5,000	59	45	.....	45	77
Coast Counties Gas & Electric Co.	810	1,750	2,560	141	71	212	[1]	[1]	17	4	8	[1]
Yosemite Power Co.	900	.....	900	416	.....	416	920	45	46	.....	46	102
Tuolumne Electric Co.	600	.....	600	81	.....	81	[1]	[1]	13	.....	13	[1]
Utica Gold Mining and Hobart Estate Co.	1,500	.....	1,500	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Mariposa Mining & Commercial Co.	400	.....	400	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
San Joaquin Light & Power Co.[4]	25,350	18,155	43,505	5,819	4,840	10,659	16,710	64	30	27	28	45
Mount Whitney Power & Electric Co.	8,350	1,937	10,287	4,273	213	4,486	9,490	47	51	11	44	92
Pacific Light & Power Corporation	84,350	42,250	126,600	8,981	21,345	30,346	67,300	45	11	51	24	53
Southern California Edison Co.	28,500	62,950	91,450	19,708	12,552	32,260	54,600	59	69	20	35	60
Ontario Power Co.	750	400	1,150	437	2	439	876	50	58	0	38	76
Holton Power Co.	950	1,000	1,950	298	221	519	1,350	38	31	22	27	69
Los Angeles Aqueduct Power	2,250	.....	2,250	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ventura County Power Co.	.....	875	875	.....	157	157	[1]	[1]	.....	18	18	[1]
Nevada-California Power Co.	18,750	.....	18,750	7,376	.....	7,376	13,900	53	39	.....	39	74
Southern Sierras Power Co.	3,500	10,000	13,500	1,960	865	2,825	9,000	31	56	9	21	67
Pacific Power Co.	3,000	.....	3,000	711	.....	711	[1]	[1]	24	.....	24	[1]
Sierra Pacific Electric Co.	8,700	.....	8,700	3,707	.....	3,707	5,365	69	43	.....	43	62
Total	417,205	265,317	682,522	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total horsepower	559,055	355,525	914,580	.....	.....	.....	.....	.....	.....	.....	.....	.....
Average[5]	.....	.....	.....	.....	.....	.....	.....	56	38	25	33	56

[1] Data not available.
[2] Maximum demand estimated by assuming load factor for 1913 to be the same as for 1912.
[3] Output figures do not include the Butt Creek hydroelectric plant, which has an installed capacity of 800 kva.
[4] Output figures do not include the Tule River hydroelectric plant, which has an installed capacity of 6,000 kva.
[5] Averages are for all plants for which data are available.

Senator WORKS. Then, according to your showing, Mr. Merrill, they will not need any additional water-power sites in California for a long time to come?

Mr. MERRILL. Not only from the showing of this table, but from a showing of other facts, there is more water power developed in California at the present time than the companies know what to do with.

Senator CLARK. Does that excessive development extend to all parts of the State?

Mr. MERRILL. Yes, sir.

Senator CLARK. Or will power have to be developed in some sections in order to meet the requirements of those sections of the State?

Mr. MERRILL. In those sections over here [indicating on map the northern coast counties] there is scarcely any population to be served; that is, to the north. Here to the south [indicating on map the San Joaquin Valley and southern California] the Pacific Light & Power Corporation and its allied corporation, the San Joaquin Light & Power Co., supplies the territory from Stockton [indicating] clear down through to Los Angeles as well as the southern California district.

Senator WORKS. What companies are there down around San Diego and the extreme southern part of the State?

Mr. MERRILL. There is no hydroelectric power down in that section.

Senator WORKS. How is it supplied with power?

Mr. MERRILL. By steam, I presume. That is, there is no hydroelectric power there shown on this map.

Senator WORKS. There are very large possibilities for power in San Diego County, are there not?

Mr. MERRILL. No; because the conditions for it there are very bad, for water power, on account of the low rain fall.

Senator WORKS. The sites are there but the water is not?

Mr. MERRILL. That is correct.

Senator SMOOT. Do I understand you to say that the minimum electric power production in the State of California was 44 per cent greater than the peak load?

Mr. MERRILL. No. I said that the peak load is 56 per cent of the installation; that leaves a margin of 44 per cent.

Senator SMOOT. Is that the installation of hydroelectric power?

Mr. MERRILL. That is the installation of hydroelectric power and steam power combined.

Senator SMOOT. And the steam generated power is about one-third of the total power, is it?

Mr. MERRILL. Approximately one-third.

Senator SMOOT. And by those figures it would appear that there was ample electricity generated in the State of California to carry the peak load of all the power used in that State?

Senator WORKS. And more than that.

Mr. MERRILL. Yes.

Senator SMOOT. Then, can you say why they maintain the steam plants?

Mr. MERRILL. They maintain the steam plants for auxiliary service and for protection in emergencies. Now, here is a company with transmission lines——

Senator SMOOT (interposing). Well, I can understand why they want the steam-generated power for protection against accident——

Mr. MERRILL. Yes; against accidents. Now, here [indicating the Pacific Light & Power Co.'s transmission line] is a line extending all that distance [indicating]; and they have to have a reserve capacity for protection to the consumer in case of accident to the line.

Senator SMOOT. I am perfectly aware of that; but what I want to know is, are you familiar with the amount of time, either in a month or any other period, that the steam plants are in operation?

Mr. MERRILL. Here is another diagram [indicating] showing local curves on the system of the Pacific Gas & Electric Co. Up here at the top are two charts of daily outputs—one is for a winter day, February 8; the other is for a summer day, August 7. This lower portion of each chart in green [indicating] shows the amount of water power developed by the corporation itself on that particular day. The next in lighter green shows the water power purchased, and the yellow at the top is steam-electric power.

Senator CLARK. What is the light green?

Mr. MERRILL. The light green shows the water power purchased from other corporations.

Senator SMOOOT. That is electricity generated from water power?

Mr. MERRILL. That is electricity generated from water power by other companies.

Senator SMOOT. Well, that was not the question I want to get information about. I want to know if you can tell to what extent the steam plants are operated in California; I mean particularly as to the length of time per day or per month or per year?

Mr. MERRILL. This shows that the Pacific Gas & Electric Co. operates its steam plants all day long, but at different rates of output, representing the distance between the two colors [indicating on the chart]. This is true both summer and winter.

Senator SMOOT. I suppose that the output of steam power comes from the fact that it is cheaper to have a steam plant right in the city; or is it because they can not get the electricity from water power?

Mr. MERRILL. The fact that large amounts of water power were purchased, as appears here [indicating on the chart], shows that at the time for which these charts were prepared the Pacific Gas & Electric Co. did not have enough water power; it has since put into operation another plant, the Drum Plant, up here [indicating on map].

Senator CLARK. What is the date that those charts were made?

Mr. MERRILL. Those charts were made for 1912.

Senator SMOOT. Why did they not purchase electric power from other companies?

Mr. MERRILL. They did. This [indicating] shows the amount of power purchased, between 20,000 and 25,000 kilowatts. They had contracts, I believe, with the Great Western Power and the Northern California Power Cos. and the Sierra & San Francisco Power Co.

Senator SMOOT. Will you show me on that map what color shows the amount of electricity generated by steam?

Mr. MERRILL. Yes, sir.

(Mr. Merrill thereupon indicated on map to Senator Smoot.)

Senator SMOOT. Well, that is only a small part of the load carried, is it not?

Mr. MERRILL. Yes. At the bottom of the chart is given the total monthly output of the corporation from 1906 to and including 1913. The portion of the chart down here [indicating] in yellow is hydroelectric power either generated or purchased.

That portion in brown [indicating] at the top is the steam power, and illustrates clearly the reason why steam power is used in connection with hydroelectric developments, particularly in the West at certain seasons of the year. The large amount of steam that is used and the small amount of hydroelectric power is on account of the variation in the water supply available at the hydroelectric plant. It is the practice in a well arranged system to carry what is called the "base" load by water power; that is to say, the portion of the load across here [indicating] that can be carried continuously throughout the day; and to carry the annual peaks which occur in a few months of the year and daily peaks, which occur at certain hours, by steam.

Senator SMOOT. What I want to understand is, what proportion of the day is this steam power used?

Mr. MERRILL. It is used all the day through; at least, I assume it is, although the lower chart shows only monthly loads.

This is the day chart [indicating]; this is from midnight of one day to midnight of the next. And this yellow [indicating] shows the steam used. Now, this [indicating] shows where the high peak comes in. There is a high peak at about 8 o'clock at night, carried by steam; there is another high peak in here [indicating] at 9 o'clock in the morning, carried by steam, and another at 3 o'clock in the afternoon. There is a very high peak at this chart at 9 p. m., because this is a winter day, and the evening lighting load is being taken.

Over here [indicating the summer chart], the three peaks are approximately the same with respect to position as over here [indicating], but the peaks are more nearly of the same height.

Senator SMOOT. Well, it would not pay the company, would it, to produce electricity and pay for it through the full year, to take care of this exceedingly high peak? Steam is much cheaper in that way than water power, is it not?

Mr. MERRILL. Steam is cheaper for peak loads.

Senator SMOOT. Yes.

Mr. MERRILL. Now, what I have stated shows the present situation, as far as California is concerned. Mr. Brackenridge told the committee the other day that the Southern California Edison Co. is proposing to construct 100,000 horsepower here [indicating] on the Kern River, in addition to what it now has.

Senator WORKS. When was this data, shown on the map, prepared?

Mr. MERRILL. That map was prepared about a year ago and then brought up to date. It was prepared in San Francisco office by the district engineer there, in cooperation with the engineers of the water-power companies, from their data.

The Pacific Light & Power Corporation has 70,000 kilowatts installed at Big Creek, but their permit and plans provide for 250,000 ultimately

Senator SMOOT. Southern California is better supplied with electricity developed by water power than San Francisco and its surrounding territory, is it not?

Mr. MERRILL. I should not say so. These three developments going down here [indicating], the Pacific Light & Power, the Southern California Edison, and the Nevada-California, were an aggregate installation of 135,000 kilowatts; while the total capacity installed in these three system [indicating] the Pacific Gas & Electric, the Great Western, and the Sierra & San Francisco is 370,000 kilowatts.

Senator SMOOT. Then the San Francisco district uses a great deal more power, of course?

Mr. MERRILL. Yes, naturally, as it is the most popular section of the State.

Senator WORKS. Have you any data with reference to the Hetch Hetchy project?

Mr. MERRILL. No; it does not appear here.

Senator WORKS. Have you included in your estimates the possible power that may be developed by the Hetch Hetchy project?

Mr. MERRILL. I have included it in the estimates for total power in the Western States in connection with the figures which I first gave you for the whole United States.

Senator CLARK. You have no figures on the subject?

Mr. MERRILL. No.

Senator WORKS. How about the power for the city of Los Angeles?

Mr. MERRILL. The city of Los Angeles is developing a power in San Franciaquito Canyon. When I was last there they were putting in their machinery.

Senator WORKS. Well, they propose to furnish their water system by an aqueduct 225 miles long; and it gives quite a good opportunity for developing water power.

Mr. MERRILL. Yes. As I recall, they expect to get about 50,000 kilowatts, on the average.

The Sierra & San Francisco has a plant on the Stanislaus [indicating] and has projected about 50,000 kilowatts more. Twenty-five thousand kilowatts have been installed in the Drum development of the Pacific Gas & Electric, and it is planned to install about 75,000 kilowatts more. The Great Western has installed 40,000 kilowatts [indicating] in the Feather River, and their ultimate developments call for about 250,000 kilowatts.

Senator WORKS. Do you know to what extent the power installation is unused because of the fact that these companies have not the necessary distributing systems?

Mr. MERRILL. I do not think that affects the situation at all. The distribution systems reach practically all the territory within the range of transmission. This map shows all the companies that do distributing in California. The figures simply show this, as I see it, that the State of California is overdeveloped at the present time; and I do not think there is a power operator at present in California who will not admit that.

Senator WORKS. Take that section of the State from San Francisco north; there are numerous small cities there, are there not?

Mr. MERRILL. There are numerous small cities there; they are all being supplied by the Pacific Gas & Electric, the Sierra & San Francisco, and the Great Western Power Cos.

Senator WORKS. Take the San Joaquin Valley, and below that; are those places supplied with electric power?

Mr. MERRILL. Yes; there is a mass of transmission lines there.

Senator WORKS. I am not talking about the development of power; I mean the distribution of the power to the various cities.

Mr. MERRILL. Yes. This map does not show the distribution systems, because there would have been a mass of color on the map had they all been platted.

Senator WORKS. Do you mean to say all of those cities I have described are connected by distributing systems with these hydroelectric plants?

Mr. MERRILL. I do not know of any city that is not.

Senator WORKS. That does not quite answer my question. I do not know how extensive your knowledge is with regard to those systems.

Mr. MERRILL. I am quite familiar with them, because I have been a resident of California, and was engaged in water-power work there for eight years.

In addition to what is developed there at the present time, an amount which is greatly in excess of what the market demands, these companies here [indicating] which I have named have their plans arranged for the development of nearly 800,000 horsepower more.

Now, whatever may be the conditions of law or lack of law, I do not think anyone can fairly state as a fact that there is any lack of water power in the State of California or any prospects of it.

Going north, to the Portland district, in Oregon, which is supplied by the Portland Railway, Light & Power Co., I was talking to the manager of that company about a year ago in Portland, and he told me that their most serious difficulty was to dispose of the power they already had, and that he wished that certain permits which they had secured from the Department of Agriculture should be extended to the farthest practicable date, because they were not in a position to develop the power, and if they did could not dispose of it.

Senator WORKS. Do you know what is the percentage increase of the power used per annum?

Mr. MERRILL. Yes; this shows it right here [indicating on map] for California. This is for the Pacific Gas & Electric Co.

Senator WORKS. What is the percentage of increase there?

Mr. MERRILL. In 1906 it starts at 28,000 kilowatts, and it gets up here on this diagram to about 78,000 kilowatts in 1913.

Senator WORKS. In what length of time?

Mr. MERRILL. In seven years.

Senator NORRIS. That is one company, is it?

Mr. MERRILL. That is one company. There has been an enormous development in the State of California.

Senator WORKS. And there has been an enormous increase in the use of power also, has there not?

Mr. MERRILL. An extremely rapid increase.

Senator CLARK. You hazard the statement that California is not going to lack for hydroelectric energy under the permits or under

the operations that are already in existence. You state substantially the same thing in regard to Oregon.

Now, if that be true, what is the necessity of going any further with this legislation, so far as those States are concerned?

Mr. MERRILL. I believe that the present law is indefensible—not because it has stopped development, but because it has made the conditions of financing severe and because it has made the capital cost higher.

Senator CLARK. Well, but there is no necessity for further development, is there, according to your view?

Mr. MERRILL. This development is coming as fast as it can be used; but it would be a good deal better for the State of California to have the people who are engaged in that development get their capital at a cheaper rate, as they undoubtedly could do under a more favorable law.

Senator SMOOT. Well, you say that there is 44 per cent of the development in the State of California now that is idle?

Mr. MERRILL. I do not wish that statement to be misunderstood. Although the peak load is only 56 per cent of the installation, it is necessary to have some margin above the peak, but not as great as 44 per cent.

Senator WORKS. Well, up to what year do you estimate that the horsepower development now existing is sufficient for the needs of California?

Senator CLARK. Present and prospective?

Mr. MERRILL. That would have to be an estimate only. But I expect that these companies will have a market for their present development well inside of five years, and that they will have to go ahead and produce more power after that. But, in addition to the water power that is developed there now, which is about 550,000 horsepower, there is already planned for future development about 800,000 horsepower more.

Senator CLARK. Have they the permits for that development already?

Mr. MERRILL. Yes.

Senator CLARK. Well, I understood you to say that with the present plans and with the present permits there will, in your judgment, always be water power enough for the State of California?

Mr. MERRILL. I think there will be.

Senator CLARK. Why, then, should we consider any further legislation to permit additional development?

Mr. MERRILL. Because I think that the condition of a revocable grant puts a cloud upon the title to such a degree that those people, when they make their development, are forced to pay more for their capital than they otherwise would.

Senator NORRIS. In other words, you think that with proper regulations this development would be carried on more economically than it would be without regulation?

Mr. MERRILL. Yes; more economically.

Senator WORKS. You are not anticipating that any of those permits will be revoked then?

Mr. MERRILL. Certainly not.

Senator SMOOT. I do not believe they could revoke one of them, because the man holding the permit would be privileged to go into

the courts if the Government attempted to revoke them without just cause.

Mr. MERRILL. That has always been my opinion.

Senator SMOOT. And the Government of the United States would have to show that there was some good reason why the permit should be revoked or else its action would never by sustained by the courts.

The CHAIRMAN. Did they not revoke 25 permits in a case that was referred to here?

Senator CLARK. Well, what would the Government do as a matter of actual practice? You say they could not lawfully be revoked without cause shown; but would the Government act upon that theory?

Mr. MERRILL. The department is acting on that theory now. What I meant to say was that if it should be revoked, I doubt whether the revocation would be effective without action in the courts. That is, I do not believe the department by a revocation could confiscate the property or stop its operation except for cause that could be mentioned in court proceedings.

Senator SMOOT. Are you connected with the Forest Service?

Mr. MERRILL. Yes; I am Chief Engineer of the Forest Service.

Senator SMOOT. You know, do you not, that there is an injunction now pending against the Utah Light & Power Co. to dispossess them of their rights?

Mr. MERRILL. Yes; there is also a suit pending against the Colorado Power Co., not, however, to dispossess them of their rights but to determine what their rights are.

Senator SMOOT. Yes; and others.

Mr. MERRILL. Yes.

Senator SMOOT. And it is your opinion, is it, that the Government of the United States can not dispossess them of their property?

Mr. MERRILL. My opinion is this—and it can only be taken for what it is worth, because I am not a lawyer—that the two suits now pending against the Colorado Power Co. and the Utah Power Co. will determine the relative rights of the corporations and of the Government in the premises. There will be no attempt in the meantime to dispossess the companies, or anything of the sort.

Senator SMOOT. Well, you could not do that until the courts decided in your favor, could you?

Mr. MERRILL. I presume not. And I may say that there has never been any attempt at any time to dispossess any permittee of his property. The attempt was made some years ago to substitute one form of permit for another. It was a mistaken policy, and I believe everybody admits it. It was one of those mistakes that sometimes happen, but it will not be repeated.

Senator WORKS. How long have you been in the Forest Service?

Mr. MERRILL. Since 1909.

Senator WORKS. In what business were you engaged before that?

Mr. MERRILL. In the water-power business.

Senator WORKS. As an engineer?

Mr. MERRILL. Yes.

Senator WORKS. What company were you connected with?

Mr. MERRILL. I was engineer for the Southern Pacific Railroad Co., and was engaged upon an investigation of the proposition to

develop hydroelectric power for the electrification of their lines in Oregon.

Senator STERLING. Were the permits issued under the act of 1901 granted under the jurisdiction of the Secretary of the Interior?

Mr. MERRILL. They were, before 1905.

Senator STERLING. Before 1905. Well, after that they were not granted by the Secretary of the Interior?

Mr. MERRILL. They were generally granted by the Secretary of Agriculture after the transfer act of February, 1905.

Senator CLARK. That act transferred the Forest Service to the Department of Agriculture, did it?

Mr. MERRILL. That act transferred the national forests from the Interior Department to the Agricultural Department. Since that time permits in national forests have been granted by the Secretary of Agriculture, and permits outside of the national forests have been granted by the Secretary of the Interior.

Senator SMOOT. Were you in the department at the time that Secretary Garfield revoked some forty-odd permits?

Mr. MERRILL. No; I did not come into the service until May, 1909, and I was district engineer for some months after that in San Francisco.

Senator STERLING. When you referred to the policy of the department you referred simply to the Department of Agriculture, did you?

Mr. MERRILL. Yes; that department.

Senator STERLING. And you meant so far as that department had jurisdiction only?

Mr. MERRILL. Yes; I can not speak for any other department.

Senator SMOOT. I do not think the water-power companies have had as much trouble with the Department of Agriculture as they have with the Department of the Interior.

Senator NORRIS. I would like to ask you this question: In the State of California, where there has been such a large development of hydroelectric power, what has been the cost, and what is the cost, to the consumer, say, in the towns and in the cities?

Mr. MERRILL. Do you mind my passing that question for a short time?

Senator NORRIS. All right.

Mr. MERRILL. I have some figures that have been prepared on that subject which will be here this afternoon.

To continue what I was saying about the present overdevelopment in the West, the Puget Sound Traction, Light & Power Co., which supplies the market in Seattle and vicinity, had last year some 20,000 to 30,000 horsepower of surplus power that it could not dispose of. It employed an engineer for the specific purpose of discovering new opportunities for industrial development and for inducing capital to invest in them in order that it might thereby be able to dispose of the surplus power. The company was offering this surplus at $18 per horsepower per year, but was unable to dispose of a large part of it.

In the eastern part of Washington, the Washington Water Power Co. is unable to dispose of its present output, and yet it is building a 75,000 horsepower plant at Long Lake, on the Spokane River.

Farther east, in Montana, it is probable that the Montana Power Co. has pretty nearly reached the limit of its present development; but it is building a 150,000 horsepower plant at Great Falls on the Missouri River.

Farther south, in Utah, I am inclined to think that there is not so much margin as in the other Western States; although I am informed that there is a considerable surplus in the territory within reach of the lines of the Utah Power & Light Co.

A similar condition exists in Colorado.

Senator CLARK. May I interrupt a moment? I want to ask you something about administration. Have you a copy of any of those permits?

Mr. MERRILL. I have not here with me, but I have at the office.

Senator CLARK. Are they uniform in their terms?

Mr. MERRILL. They are uniform.

Senator CLARK. Will you be kind enough to supply one of those to the committee, so that it can appear in the record of this hearing?

Mr. MERRILL. Yes; I will do so.

(The papers referred to will be found following Mr. Merrill's remarks.)

Senator CLARK. I understand you to say that those permits are uniform; the same permit is issued to one applicant as to another?

Mr. MERRILL. The same permit is issued to everybody.

Senator CLARK. As to its conditions, I mean?

Mr. MERRILL. Yes.

Senator CLARK. And do those conditions involve a rental or compensation for the land?

Mr. MERRILL. They do.

Senator CLARK. And that is also uniform, is it?

Mr. MERRILL. That is uniform.

Senator NORRIS. How much is that?

Mr. MERRILL. It varies from 10 cents per horsepower year to $1 a horsepower year, on the minimum flow of the stream, with certain deductions.

Senator NORRIS. Well, leaving out the deductions, how much is it?

Mr. MERRILL. It amounts to around 30 cents in fully developed plants. The collections for last year from all hydroelectric permits outstanding issued by the department, for a total of about 900,000 horsepower, were approximately $60,000.

Senator NORRIS. For one year?

Mr. MERRILL. For one year.

Senator SMOOT. But that increases every year—the charge—does it not?

Mr. MERRILL. Yes; the receipts will be greater in the future.

Senator NORRIS. Well, there is a maximum, is there not?

Mr. MERRILL. There is.

Senator SMOOT. The minimum is 10 cents and the maximum is $1; is that correct?

Mr. MERRILL. Yes.

Senator NORRIS. Do you mean that all permits commence at 10 cents and finally reach $1?

Mr. MERRILL. The rates in all permits are the same. The charge, however, varies according to the amount of national forest lands

used. The change is based on the minimum horsepowers of the site, and deductions are made in proportion to the distance of transmission and in proportion to amount of national forest land occupied; that is, if only 10 per cent of the land occupied by the plant is on the national forest, only 10 per cent of minimum horsepower is charged for. This table illustrates the method of computation.

(The table referred to is as follows:)

Operating plants of the Southern California Edison Co.

Name of plant.	Total power capacity, horsepower.	Rental capacity, horsepower.	Installed capacity of generators.		Relation total to installed capacity.
			Kilowatts.	Equivalent horsepower.	
Mill Creek No. 2	148	54	250	325	0.44
Mill Creek No. 3	806	630	3,000	4,025	.20
Santa Ana No. 1	881	485	3,000	4,025	.22
Santa Ana No. 2	388	367	1,000	1,340	.29
Lytle Creek	282	175	500	670	.42
Kern River No. 1	11,200	9,730	20,000	26,820	.42
Total	13,705	11,441	27,750	37,215	.37

NOTE.—The maximum annual charge is $1 per horsepower on the rental capacity of 11,441 horsepower or $11,441, equal to 37 cents per horsepower installed.

In the House committee hearings a table was inserted, a copy of which I have here, showing the new corporations that had constructed their plants and commenced to operate since March 2, 1909, under revocable license, on the national forests.

(The table referred to is as follows:)

New corporations constructing and operating power plants on national forests since Mar. 2, 1909.

State.	National forest.	Corporation.
Idaho	Kaniksu	Inland Portland Cement Co.
South Dakota	Black Hills	Dakota Power Co.
Colorado	Leadville	Tin Cup Gold Dredging Co.
Idaho	Lemhi	Mackay Light & Power Co.
Nevada	Ruby	Elko-Lamoille Power Co.
California	Mono	Pacific Power Co.
Montana	Beartooth	Cooke Mining & Reduction Co.
Do	Madison	Montana-Illinois Copper Mining Co.
Colorado	Sopris	Colorado Yule Marble Co.
Do	do	Tam O'Shanta-Montezuma Mines & Development Co.
Arizona	Tonto	Arizona Power Co.
Idaho	Salmon	Kittie Burton Gold Mines Co.

The total development, as I recall, is approximately 15,000 horsepower. The conclusion has been drawn from this table, because only 15,000 horsepower had been developed in that time, that the fear of revocation of a license granted by the department has deterred any new concerns, except the few here, from taking out permits and from making developments on the national forests.

Now, I can not speak for all of the Western States, because I am not sufficiently familiar with all to do so. But in the State of Cali-

fornia, during this same period, although there has been no new development started on the national forests, there has also been no new development started outside of the forests; that is, there is no concern developing power in the State of California to-day that was not operating and developing power prior to March 2, 1909.

Senator SMOOT. That may be true in California, because they started with the idea of an immense development in the original inception of that industry.

Mr. MERRILL. That is quite true.

Senator SMOOT. But I am quite sure that is not the case in some of the other Western States that I am familiar with.

Mr. MERRILL. I said I could not speak for them all. What I wish to bring out is that no just or reasonable conclusion can be drawn unless we compare the list in this table with a corresponding list of entirely new enterprises started on private lands in the same States during the same periods.

Mr. Cooper said that he had made a table showing 900,000 horsepower of new developments in the United States since 1909. He agreed to let me take that table and see where those developments were and how many of them were made in the States covered by this table, but Mr. Cooper was called out of town, and I received a telegram from him this morning, saying that he would mail this table to me later.

Senator WORKS. Do you know whether, in the time you have mentioned, there has been any development on private lands?

Mr. MERRILL. There has not; I mean there has been no new industry started; no new concern has gone into the market.

Senator WORKS. Some of these companies have made new developments on different streams, have they not?

Mr. MERRILL. Certainly.

Senator SMOOT. Well, in California, you have said that they have developed 500,000 horsepower; that is the total amount of hydroelectric power in that State?

Mr. MERRILL. Yes.

Senator SMOOT. And you also said that they have a reserve of 800,000 horsepower, and therefore they certainly would not want to start anything in addition to that reserve?

Mr. MERRILL. That is just the point, and that is just the reason why there have been no new enterprises started on the national forests. Those companies already in the field have developed, and continue to develop, on the public lands, not only in California, but elsewhere. But the conclusion was drawn from that table, however, that no development would have been made on the national forests if the companies had not had operating plants that had been built on private lands or on public land prior to 1909, and that no new enterprise would think of starting its development upon a national forest.

Senator SMOOT. Is there not another side to that, that everything has been put into the national forests, because it was impossible to get the power sites and water power outside of the forests?

Mr. MERRILL. I could not agree with that conclusion, because I am sure there are enormous possibilities for water-power development of the national forests in the West.

Senator WORKS. On public lands?

Mr. MERRILL. On public lands and also on private lands.

Senator CLARK. Well, do you know of any water powers that have not been segregated either by including them in forest reserves or withdrawing them for water-power purposes, on the public lands?

Mr. MERRILL. I do not know what has been withdrawn by the Secretary of the Interior.

Senator SMOOT. Well, I will say for your information that I do not think there is any water power on public lands in the United States that is not either in reserve or has been withdrawn for water-power purposes.

Senator CLARK. There may be some few.

Senator SMOOT. If there is any that is not reserved it is because they do not know where it is located.

Senator NORRIS. I understood you to say, however, that there is a great deal of water power in these Western States, including California, that is not on the public lands at all?

Mr. MERRILL. Oh, yes.

Senator CLARK. Where are they?

Mr. MERRILL. The Pacific Gas & Electric Co. has practically its entire development on private lands.

Senator CLARK. Well, those are already developed on private lands; but I thought you referred to those which were undeveloped.

Mr. MERRILL. The Pacific Gas & Electric Co. claimed only a year or two ago that it owned enough undeveloped water-power sites to supply its market for a generation. There are also undeveloped water powers on the Columbia River, the Snake River, and Clarks Fork.

Senator SMOOT. Undeveloped water powers on the Snake River?

Mr. MERRILL. I think so; at Big Falls, for example.

Senator SMOOT. Well, the last ones that I knew about being located—just as soon as they were located they were withdrawn; and I do not believe that you would deny the fact that if there was a power site located now upon the Snake River, anywhere from its head to its mouth, it would be immediately withdrawn for water-power purposes.

Mr. MERRILL. If it were on public lands; yes.

Senator NORRIS. But he was speaking of private lands.

Senator SMOOT. That is what I say.

Senator NORRIS. One of you is talking about public lands and the other about private lands.

Mr. MERRILL. I was talking about private lands. The development that Mr. Pierce was speaking about, on the falls of the Columbia River, I believe is on private land. There is also the proposed development of 300,000 horsepower at the Dalles of the Columbia.

Mr. MITCHELL. Mr. Chairman, I think I could tell you about that. I am very familiar with the water-power conditions on both the Snake and the Columbia Rivers, and I happen to know the large power that Mr. Pierce has been trying to develop. I think his development for his fertilizer plant that he is working on, together with the overflowed lands, amount to somewhere between 7,000 and

8,000 acres; there are about 200 acres that would be overflowed by a pond——

Senator SMOOT (interposing). On public lands?

Mr. MITCHELL. On public lands. And that land has been withdrawn; and, furthermore, I am very familiar with all the water-power sites on both the Snake and Columbia Rivers, and I do not know of any Government land, no matter how small and no matter whether there is any fall on it that would be available in any way for water power, that has not been withdrawn; and it was my information that it was the policy of the Interior Department to withdraw any public lands anywhere that could in any way be used for the development of water; that is, whether they were needed for reservoir sites or for pipe lines or for any other purpose, their idea being to bring them all under the jurisdiction of the Interior Department, either under the present laws or under the new law. In other words, they were trying to prevent any water-power development anywhere where public land was involved, unless it came through the Interior Department under existing law or under some new law which they hoped to get through Congress.

Senator CLARK. I think that is quite consistent with the policy of the department.

Mr. MERRILL. That statement is correct, so far as I know.

Mr. MITCHELL. Most of them have a small part of public land which is involved in their development.

Senator SMOOT. I can say further that in the State of Utah it is impossible to develop water power without a part of it being on the public lands.

Mr. MERRILL. I will not question your statement, because I do not know about that. My opinion is, from a general knowledge, that there are considerable water-power sites on private lands.

Senator NORRIS. Well, if they are on private lands the Government can not withdraw them.

Senator CLARK. There are none on private lands.

Senator WORKS. Do you know of any water-power sites in California on public lands that are available?

Mr. MERRILL. I can not answer that off-hand, because I have never investigated the question.

Senator CLARK. The only ones on private lands in California are those that were developed before the present policy was adopted, because if it had been otherwise they would have immediately withdrawn the lands just as soon as the filing had been made.

Mr. MERRILL. But it is certain that whether there are sites on private lands or not the best sites are on public lands.

I have also this list, which Mr. Cooper gave, of the water powers developed on public lands by those companies whose first developments, and in most cases their subsequent developments also, have been under revocable licenses—because that is all the law has permitted up to the present time. There are about 325,000 horsepower developed by those concerns. The statement gives the names of the concerns and their installation in each case. If it is of interest to the committee I will have it inserted in the record.

(The statement referred to is as follows:)

Water-power development on national forests under revocable license by companies whose first hydroelectric plants were built on public land.

[Installed capacities of developments on national forest land.]

State.	Permittee.	Installed capacity (horsepower).
Arizona	Arizona Power Co	9,000
California	Mount Whitney Power & Electric	6,500
Do	Nevada-California Power Co	18,000
Do	Oro Electric Corporation	2,760
Do	Pacific Light & Power Co	112,000
Do	Pacific Power Co	4,000
Do	San Joaquin Light & Power Corporation	34,000
Do	Sierra & San Francisco Power Co	48,000
Do	Tuolumne Electric Co	800
Do	Utica Gold Mining & Ho art Estate Companies	2,000
Do	Western States Gas & Electric	2,000
Colorado	Central Colorado Power Co. (Shoshone plant)	18,000
Do	Colorado Springs Light, Heat & Power Co	3,000
Do	Colorado Yule Mar. le Co	1,750
Do	Cuchara Lumber & Supply Co	50
Do	Eagle Mining & Milling Co	130
Do	East Lake Mining & Milling Co	40
Do	Glenwood Light & Water Co	530
Do	Green & Clear Lakes Co	1,800
Do	Indiana Colorado Mining & Milling Co	250
Do	Marion Mines & Mill Co	100
Do	Manhattan Milling & Power Co	50
Do	Ramsey, Hugh B	20
Do	Rico Mining Co	300
Do	Salida Light, Power & Utility Co	750
Do	Tam O'Shanter-Montezuma M. & M. Co	140
Do	Thistle, M. L	125
Do	Tin Cup Gold Dredging Co	300
Idaho	Kitty Burton Gold Mines Co	400
Do	Teton Valley Power & Milling Co	200
Montana	Anaconda Copper Mining Co	1,470
Do	Cooke Mining & Reduction Co	130
Do	Grange ille E. L. & T. Co	420
Do	Helena Power & Transmission Co. (Montana Power Co.)	18,760
Do	Montana-Illinois Copper Mining Co	150
Do	Stover, W. H	20
Nevada	Elko-Lamoille Po er Co	330
Oregon	City of Ashland	400
Do	Crown-Columbia Pulp & Paper Co	1,750
Do	Eagle River Electric Co	800
Do	Eastern Oregon Light & Po er Co	2,800
Do	Mount Hood Railway & Po er Co	11,250
Do	West Coast Mines Co	300
South Dakota	Dakota Po er Co	2,400
Utah	City of Manti	450
Do	Columbus-Consolidated Mining Co	800
Do	Mackay Light & Power Co	135
Do	Michigan-Utah Mining Co	200
Do	Ophir Hill Consolidated Mining Co	750
Do	Skougaard, C. A	10
Do	Spring City Light & Milling Co	10
Washington	Chancellor Gold Mining Co	250
Do	Deckman, Louis	40
Do	Great Northern Railway	8,250
Do	Inland Portland Cement Co	4,730
Do	Superior Portland Cement Co	1,500
Do	Valley Development Co	70
Wyoming	Babione	20
Total		325,130

Mr. MERRILL. Mr. Ward, representing the Pacific Light & Power Co., stated in his testimony before this committee that his company had not paid dividends except for a small amount in the last three years, as I recall, since the concerns had been in operation.

So far as my information goes that is the fact; but, to have been perfectly frank, Mr. Ward should have stated that the failure to pay

dividends was not because the concern could not pay dividends, but because it devoted its surplus which might have been paid in dividends to extension of its properties.

Mr. SHORT. Mr. Merrill, in the absence of Mr. Ward, I should like to make this further statement; you mentioned this matter to me and I mentioned it to him?

Mr. MERRILL. Yes.

Mr. SHORT. That is, while it is true that in the early developments, before this Big Creek plant was put in, the earnings went to extensions and betterments; it is also true that a year or a year and a half ago the company levied an assessment of $1,250,000 on the stock of the company, which it was necessary to raise to make a bond issue under the law, and that assessment was paid in.

Mr. MERRILL. Do you mean in connection with the Big Creek development?

Mr. SHORT. Yes; they levied an assessment on the common stock, amounting to $1,250,000, and the stockholders had to pay that in; so that if you take the entire truth, it will work both ways.

Mr. MERRILL. Yes. I simply did not want the inference to go before this committee from a mere thoughtless statement made by Mr. Ward, I think, that the condition was such in California that operating companies do not more than pay expenses.

I have a statement here also showing the revenues and expenses of the Pacific Gas & Electric Co., the Southern California Edison Co., and the Pacific Light & Power Co. from the years 1902 to 1913. I will leave that for the record, if I may do so.

(The statement referred to is as follows:)

Pacific Gas & Electric Co., earnings and expenses, 1906–1913.

	1906	1907	1908	1909	1910	1911	1912	1913
Gross revenue from operation	$8,742,495	$11,193,325	$12,474,746	$13,298,308	$13,829,972	$14,451,497	$14,473,526	[1] $15,869,006
Maintenance	673,067	1,057,163	1,219,462	1,210,506	1,243,859	1,398,404	1,085,959	1,042,994
Operating expenses, taxes and reserves for uncollectible accounts, casualties, etc.	3,750,052	5,169,066	5,573,227	6,321,070	6,677,482	6,815,668	7,345,602	8,288,213
Total expenses	4,423,119	6,226,229	6,792,719	7,531,576	7,921,341	8,214,072	8,431,561	9,331,207
Net revenue from operation	4,319,376	4,967,096	5,682,027	5,766,732	5,908,631	6,237,425	6,041,965	6,537,799
Merchandise sales and miscellaneous income	204,667	148,815	182,559	192,980	214,624	153,112	271,126	333,331
Total net revenue	4,524,043	5,115,911	5,864,586	5,959,712	6,123,255	6,390,537	6,313,091	6,871,130
Interest (including interest in unifying and refunding bonds and on all other funded and unfunded debt)	2,784,908	2,854,264	3,021,722	2,988,521	3,006,256	3,254,133	3,568,944	3,902,045
Balance	1,739,135	2,261,647	2,842,864	2,971,191	3,116,999	3,136,404	2,744,147	2,969,085
Deductions:								
Accrued dividends on common stock							1,520,435	398,843
Accrued dividends on preferred stock	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Sinking funds	581,448	578,858	621,063	667,210	733,402	773,226		[2]
Bond discount and expense			44,259	42,237	47,220	75,672	127,871	246,041
Total deductions	1,181,448	1,178,858	1,265,322	1,309,447	1,380,622	1,448,898	2,248,306	1,244,889
Balance	557,687	1,082,789	1,577,542	1,661,744	1,736,377	1,687,506	495,841	1,724,196
Sundry accretions							25,380	
							521,221	

[1] Includes $261,734 in litigation for which a reserve has been created from the surplus account.
[2] Sinking fund installments amounting to $299,691 had matured at Dec. 31, 1913, but were not paid pending legal decision as to interpretation of provisions of trust deed.

Pacific Light & Power Corporation, earnings and expenses, 1903–1913.

Year ending—	Gross earnings.	Operating expenses.	Net earnings.	Fixed charges.	Balance for dividends and depreciation.	Dividends.	Surplus.
Mar. 31, 1903	$399,051	$175,218	$223,833	$134,805	$89,028	None.	$89,028
Mar. 31, 1904	652,994	344,396	308,598	177,931	130,667	None.	130,667
Mar. 31, 1905	807,652	416,413	391,239	209,106	182,133	None.	182,133
Dec. 31, 1905 [1]	824,470	436,653	387,817	230,749	157,068	None.	157,068
Dec. 31, 1906	1,332,534	633,441	699,093	339,431	359,662	None.	359,662
Dec. 31, 1907	1,281,055	531,816	749,239	336,096	413,143	None.	413,143
Dec. 31, 1908	1,821,853	970,014	851,839	474,487	377,352	None.	377,352
Dec. 31, 1909	1,923,510	1,074,573	848,937	508,409	340,528	None.	340,528
Dec. 31, 1910 [2]	2,065,753	1,314,404	751,349	479,058	272,291	$10,102	262,189
Dec. 31, 1911	2,294,676	1,228,699	1,065,977	471,342	594,635	63,058	531,577
Dec. 31, 1912	2,546,892	1,447,244	1,099,648	480,512	619,136	72,232	546,904
Dec. 31, 1913							

[1] Nine months, Apr. 1 to Dec. 31, 1905

[2] Pacific Light & Power Corporation succeeded Pacific Light & Power Co. in 1910.

Southern California Edison Co., earnings and expenses, 1902–1913.

Year.	Gross revenue.	Maintenance, operation, and taxes.	Net revenue.	Fixed charges (bond interest and amortization).	Miscellaneous payments.				Net surplus.
					Balance.	Dividends.	Depreciation.	Total.	
1	2	3	4	5	6	7	8	9	10
1902	$486,343	$228,545	$257,798	$113,352	$144,446	$53,160	.....	$53,160	$81,286
1903	690,074	330,450	359,624	138,351	221,273	116,968	.....	116,968	104,305
1904	982,144	502,810	480,334	228,427	251,907	144,733	.....	144,733	107,174
1905	1,272,564	528,904	743,659	299,246	444,413	208,887	$236,460	505,447	[1] 61,034
1906	1,731,421	719,997	1,011,523	424,224	587,299	196,144	481,565	677,709	[1] 90,410
1907	2,206,380	868,374	1,338,006	574,517	763,489	328,486	243,337	571,823	191,666
1908	2,477,062	1,032,452	1,444,610	601,442	843,168	559,800	280,000	839,800	3,368
1909	2,825,407	1,486,153	1,409,254	598,712	810,542	289,820	500,000	789,820	20,722
1910	3,384,933	1,717,857	1,667,076	661,492	1,015,584	470,000	545,000	1,015,000	584
1911	3,738,168	1,835,883	1,902,280	624,829	1,277,451	571,250	650,000	1,221,250	56,201
1912	4,337,441	2,329,086	2,008,355	[1] 708,796	1,299,559	.....	630,000	.....	.....
1913	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Deficit.

Senator NORRIS. I would like to have you state, in a brief way, what the result shown by those tables is.

Mr. MERRILL. The net surplus of the Southern California Edison Co. has varied from a deficit of $90,410 to a surplus of $191,000.

The surplus of the Pacific Light & Power Co. has varied from a minimum of $89,000, in 1903, to a maximum of $546,000, in 1913, in which year they also paid $72,000 in dividends.

The statement was also made by Mr. Pierce, of Washington, either in connection with a concern in which he was interested, or else one of which he had knowledge, that did not succeed in getting its rights of way on the Coosa River, that it went across into Canada and made developments at Niagara, and secured from the government of Quebec water rights on the Saguenay River, under conditions much more favorable than could be secured here.

That is not entirely correct. The rights which the company secured for the Saguenay development were not from the government of Quebec, but from private owners, from a man named Wilson, who had secured these rights from the Quebec government several years ago at a time when the policy of the government was to sell its water rights. I have also here a telegram from——

Senator CLARK (interposing). Let me ask you this question now: Has the Province of Quebec made a change within a few years as to the disposal of the water?

Mr. MERRILL. I believe they have. My recollection is now that they disposed of it only under lease. I believe Mr. Challies's statement, if it is put in the record, will cover that. That is my recollection.

Senator ROBINSON. Well, did the Mr. Wilson, who acquired this site from the government of Quebec, assign it? Was he permitted to assign it to the operators?

Mr. MERRILL. Yes. My information from Mr. Challies was that Mr. Wilson sold that power to the company up there, or made some transfer of it, and that the company and Mr. Wilson are now in litigation over it.

Mr. Finney, of the Department of the Interior, in making his original statement to the committee, spoke about the laws in effect in Ontario; and Senator Smoot asked him if there had been any developments there under the law, stating that his information was that there had not been. I inquired of Mr. Challies when he was here, and he telegraphed to the chief engineer of the Hydroelectric Commission in Ontario, and I have this telegram in reply:

TORONTO, ONTARIO, *December 19, 1914.*

J. B. CHALLIES,
Care O. C. Merrill, Chief of Engineer, Forest Service,
Department of Agriculture, Washington, D. C.

Number of projects, 21. Installed capacity, 300,000. Capacity, 407,000. Approximate investment generation, only 30,000,000.

F. A. GABY.

Now, I presume, those include the Niagara developments also.

Senator CLARK. Well, is there anything in the telegram which was sent to him which ought to be read in connection with his reply? Have you a copy of the telegram that was sent to Mr. Gaby?

Mr. MERRILL. No; Mr. Challies himself sent the telegram. What I asked, Mr. Challies, was to find out what developments had been

made in Ontario since the passage of this law, to which Mr. Finney referred.

Senator CLARK. When was that?

Mr. MERRILL. 1898; that was the law of which Mr. Finney was speaking in his testimony.

I would like now to say a few words in answer to Senator Norris's question relative to steam-power costs, and their relation to water-power cost. Mr. Lincoln in his statement said that the conditions of modern power development are such that the capital costs in steam development are approximately equal to the operating costs, and that no power development, or rather that any one expecting to invest in water-power development would look very carefully into the matter, if investment cost for water power was more than twice the investment cost for steam power. The statement was so startling that I decided to investigate it. Mr. Lincoln also made another general statement, to the effect that on the average the cost of steam power and water power are practically the same.

Senator Robinson tried to get Mr. Lincoln to give definite figures as to any one development where that was the case, but did not succeed. These statements of Mr. Lincoln are like a great many other general statements. You might say, for example, that if the per capita wealth in the United States is $2,000, therefore no one in the country could want—such a general conclusion would have about as much value as the statement of Mr. Lincoln with respect to power cost.

In the eastern part of the United States where there is not much water power, electric energy is developed by steam. In the western part of the United States where water power is abundant, steam power is used for practically nothing except auxiliary service.

I have here some figures of generation costs from the New York Edison's "Waterside B" station, which is about as efficient as there is; is it not, Mr. Mitchell?

Mr. MITCHELL. It is the best one in New York City, but not as good as the one in Chicago.

Mr. MERRILL. No; I understand the Chicago Edison is a little better.

Mr. Short calls my attention to the fact that there is in California considerable gas-engine pumping that is run in competition with steam and hydroelectric power.

The Long Beach plant of the Southern California Edison Co. and the Redondo plant of the Pacific Light & Power Co.——

Senator WORKS (interposing). Now, you have got back to southern California?

Mr. MERRILL. Yes. The figures I am about to give you relate to two southern California plants, one San Francisco plant, and one New York plant.

The coal consumption according to reports given by the company to the Public Utilities Commission at the "Waterside B" station, of the New York Edison Co., is 2.43 pounds per kilowatt hour.

The fuel costs are as follows: 80 per cent of coal used is bituminous coal, at $1.75 per ton; 20 per cent is anthracite coal, at $2.55 per ton; and the average cost of all fuel used is $1.90 per ton.

The figures immediately below on the table in Column I [handing copies of table to members of committee] show the labor, fuel, sup-

plies, and repairs on the basis of the power sold in the station of the New York Edison Co. as approximately 5 mills.

The figures in the next column show costs on the basis of power generated, where 24.9 per cent is lost in distribution, giving approximately 4 mills per kilowatt hour of generating cost.

In Column III are the figures presented by Mr. Britton, of the Pacific Gas & Electric Co., in a report made to the Public Utilities Commission of San Francisco. These show 1.06 cents as the steam-power cost in San Francisco on the basis of the power delivered, and 8 mills, approximately, on the basis of the power generated. As to the Long Beach plant I have been forced to assume certain figures. Mr. Brackenridge gave the figures of fuel consumption. I have merely assumed the figures shown in the parenthesis (a) as being, in my judgment, the closest that can be had from what information is available. On these assumptions the Long Beach power cost—cost of power generated—is 3½ mills. In the Redondo figures at the right of the table, while I have assumed the figures (a), the figures marked (b) are those given by the corporation as its operating costs at Redondo.

At the bottom, on the same sheet, are the figures for the water-power operating costs at the Borel plant of the Pacific Light & Power Co.——

Senator CLARK. May I interrupt you for a moment? I have just been looking at this part of the table as to the average cost of the coal. Just how do you figure that?

Mr. MERRILL. I figure it this way: That there are 80 tons of bituminous coal costing $1.75 and 20 tons of anthracite coal costing $2.55; so that 100 tons would cost $1.90. You see, the average is not the mean of the $1.75 and the $2.55.

Senator CLARK. No; but you are figuring the 80 tons at $1.75 and the 20 tons at $2.55?

Mr. MERRILL. Yes; that is the way I figure it.

Senator CLARK. Yes; and that is right.

Mr. MERRILL. Yes; it is not the mean of the $1.75 and the $2.55, because there is more of the cheaper coal in there.

Senator CLARK. That is right.

Mr. MERRILL. These figures for the Borel station give a production cost of 0.033 cent. That includes the labor and fuel and therefore should compare with 0.338 cent for New York, 0.702 cent for San Francisco, 0.336 cent for Long Beach, and 0.372 cent for Redondo.

The maintenance charges are approximately the same as for the New York Edison station. The transmission expenses, of course, properly should be added onto water-power costs to compare with steam-power costs.

So that the costs upon an equivalent basis, delivered to substation for the New York Edison Co. and for the other concerns, as shown on the top of the table, should be compared with the total of 0.128 cent for the Borel hydroelectric plant.

That is a comparison of costs in extremely high-class steam plants with the costs in a high-class water plant.

Senator NORRIS. That is the cost of just what?

Mr. MERRILL. Per kilowatt hour.

Senator NORRIS. And the steam cost is about 4 mills?

Mr. MERRILL. The steam cost varies there from a maximum of 1 cent in San Francisco to a minimum of 3.56 mills at Long Beach.

Senator NORRIS. What is the one that is 4 mills?

Mr. MERRILL. The Redondo plant of the Pacific Light & Power Co., the same concern that operates the Borel plant.

Senator ROBINSON. How does the hydroelectric cost compare with that?

Mr. MERRILL. The hydroelectric cost, the only one of which I have the definite figures, is 1¼ mills delivered at substation, as compared with a cost of steam power delivered of from 3.5 mills up to 10 mills.

Now, this also should be stated here: I am comparing only generating costs. In addition to those are many other costs that will come in; but those costs will be uniform for the two systems; it costs just as much to distribute steam power as it does electric power, and vice versa; it costs just as much for administration expenses and it costs just as much to collect bills.

Senator NORRIS. You are counting putting that power into substations?

Mr. MERRILL. Yes; delivering to substations.

Senator SMOOT. You are not taking into consideration the cost of plant at all, are you?

Mr. MERRILL. No, sir; these are merely generating costs.

Senator SMOOT. Because the cost of one plant is twice as much as the cost of the other.

Mr. MERRILL. More than that.

Senator SMOOT. More than that, and interest must be added to this cost; and I am quite sure that there is no plant in the world that could produce a kilowatt hour of electricity for 1¼ mills.

Mr. MERRILL. Oh, no.

Senator SMOOT. It is impossible.

Mr. MERRILL. This is simply the generating cost; and you would probably have to multiply that by three or four in order to get the total costs.

Senator SMOOT. Yes.

Senator NORRIS. In other words, in these figures you have not counted any interest on the investment?

Mr. MERRILL. No.

Senator NORRIS. You have taken the completed plant in both cases?

Mr. MERRILL. Yes; the completed plants, whatever they were. And I have started on this basis because I wished to carry that statement a little further than Mr. Lincoln went. If the operating cost and the capital costs on steam are the same, and if it costs nothing to operate a water-power plant, the water plant can not compete with the steam plant if the former costs twice as much per kilowatt hour to install, was Mr. Lincoln's general statement.

I have here [indicating] another table in which I have taken those figures from the table I have just read merely in order to try out Mr. Lincoln's assumption; this table is on the basis of the New York Edison plant, the Pacific Gas & Electric Co.'s plant, and the Long Beach and Redondo plants, as before.

The first column shows the generating costs.

The second column shows the capacity-load factors. This is one of the most important considerations in water-power development. The "capacity-load factor," so-called, is the relation between the kilowatts installed and the kilowatts used, or the average kilowatts used.

If Mr. Lincoln's assumption is correct, that capital costs and operating costs are equal, even if the plants were operating at 100 per cent load for 24 hours a day, the New York Edison would have cost $564; the Pacific Gas & Electric would have cost $1,138; the Long Beach plant, $521; and the Redondo plant, $585 per kilowatt, and we know that they cost nothing like that.

On the basis of the actual capacity-load factor, which is for the New York Edison Co. 23 per cent, for the Pacific Gas & Electric Co.'s San Francisco plant 31 per cent, for the Long Beach plant 23 per cent, and for the Redondo plant 62 per cent, the costs, on Mr. Lincoln's assumption should have been $129.70, $352.80, $119.80, $362.70 per kilowatt, respectively, in order that generating cost and capital costs should be equal. I should add, perhaps, that Mr. Lincoln used the expression "operating costs" instead of "generating costs," but since he included only labor, fuel, supplies, and repairs, the two terms are identical for purposes of this comparison.

As far as I can learn, the actual costs were approximately as shown in the column immediately to the right. That is, $50 a kilowatt for the New York plant and $130 per kilowatt for the Pacific Gas & Electric plant. As the note shows, that figure is from data supplied by Mr. Britton to the public utilities board in San Francisco. The Long Beach plant cost $50 per kilowatt hour, I am told, and the other plant somewhat more.

Senator STERLING. The Redondo plant costs somewhat more?

Mr. MERRILL. Yes; the Redondo plant costs somewhat more than the Long Beach plant. But those figures, even though there may be 10 or 15 per cent of error in them, do not approximate the figures in the preceding columns which it is necessary they should do, if Mr. Lincoln's statement is correct.

Senator SMOOT. Mr. Merrill, it seems to me that the figures hardly demonstrate what we actually want to know, because of the fact you figure upon the capacity-load factor—the percentages of that capacity?

Mr. MERRILL. Yes.

Senator SMOOT. Well, you have one percentage of 23, and another of 62?

Mr. MERRILL. No; those are for the various plants, not the various years.

Senator SMOOT. Well, I did not refer to years; I referred to the percentage of the capacity load of each of the plants.

Mr. MERRILL. Yes.

Senator SMOOT. And of the New York Edison plant the per cent of load capacity is 23, and of the Redondo plant it is 62.

Mr. MERRILL. Yes.

Senator SMOOT. Well, I do not see why any figures based upon that wide difference in the capacity load factor would have any bearing upon the actual cost; I can not see that they would.

Mr. MERRILL. They do, because those factors are the ones, in the first place, that determine whether you should put in one kind of a power or another kind of power. These figures for the New York

Edison Co. are what the Edison Co. expects to do year after year; and so when it is estimated $50 per kilowatt actual cost, that is not $50 on the kilowatt output, but five times as much. The Redondo plant, under its conditions of operating, is in a much more favorable situation.

Senator SMOOT. Yes; I am perfectly aware of that; and therefore it seems to me that the comparison of figures ought to be of plants in different locations of the country built about the same time, and whose capacity load factor is about the same, if we are going to arrive at any definite information with relation to the cost of generation of power.

Mr. MERRILL. Perhaps the next table that I present may show that.

Senator SMOOT. Well, that statement may show that.

Mr. MERRILL. What I intended to present in this table and to show was that the statement of Mr. Lincoln as to the equality between operating costs and capital costs is entirely incorrect, at least so far as figures are available; and that will appear at the end of the table, where is shown the actual relation that exists in these plants.

Senator SMOOT. And the fact that the capacity load factor was so different in itself would prove, without anything else, that the two costs could not be equal.

Mr. MERRILL. It ought to show that.

Senator SMOOT. Well, it does; it can not help it.

Mr. MERRILL. It can not help it; no. But that is all the greater proof of the fallacy of the statement. It is not true under any of the widely varying conditions shown in the table, and the more favorable the operating conditions the more is Mr. Lincoln's general statement in error.

The last column in the table shows that under actual operating conditions at those three plants the capital costs varies from 15 per cent of the operating cost at the Redondo plant to 42 per cent of the operating cost at the Long Beach plant. This shows that any general conclusion as to the ratio of operating to capital charges is valueless.

I have one more table here, in which I have taken the figures for two plants, Long Beach and Borel, to determine what, under the operating conditions of the Southern California Edison Co. could be the allowable installation cost in water-power plant per kilowatt.

I have assumed in this table that both plants are to turn out power at the same cost; that is, that generating plus operating cost shall be equal; and that the installation cost is $50 per kilowatt at Long Beach, in order to determine how much could be invested in water-power plant at Borel, under varying conditions.

The first two columns have the same total expense of approximately 4 mills per kilowatt. I have compared them in these columns on the basis of 100 per cent capacity load factor. If the installation costs at Long Beach are $50 per kilowatt, it would be possible to invest $380 per kilowatt at Borel, or about seven times as much in the steam plant, and have exactly the same output costs if they are operating at 100 per cent capacity load factor. They are not operating at that load factor, because, as shown in the figures given below, the steam plants of the Southern California Edison Co. are operating at a 20 per cent factor, and their water-power plant at 69 per cent. On that basis, $50 per kilowatt of installation at Long Beach

is equivalent to $400 per kilowatt of installation at Borel, which means that you could afford to put eight times as much capital investment into a hydroelectric plant as you could into a steam-generating plant, under the operating conditions of the Southern California Edison plants.

Senator NORRIS. As I understand it, you deduce from these particular figures that in these particular cases you use in the table it would be just as practicable, as a matter of investment, to invest 8 times as much in waterpower to start the business as it would in steam plants?

Mr. MERRILL. Under those operating conditions, yes—the conditions actually obtaining under that system.

Senator NORRIS. To make the two plants equal, then, the cost of the water-power development could be 8 times as much as the steam?

Mr. MERRILL. The complete development to substation; that does not include distribution.

Senator SMOOT. On the basis of those costs?

Senator CLARK. On the basis of using 100 per cent of the power.

Senator SMOOT. Oh, no.

Mr. MERRILL. On the basis of using 20 per cent of the steam-plant capacity and 69 per cent of the water-plant capacity.

Senator NORRIS. On the basis of using the actual percentage that is used in those places now?

Mr. MERRILL. Yes.

Senator SMOOT. That is, in those installations.

Mr. MERRILL. I would like to insert the three tables to which I have been referring in the record at this point.

(The tables referred to are as follows:)

STEAM-POWER COSTS V. WATER-POWER COSTS.

New York City. Coal consumption is at minimum in Waterside "B" stations of New York Edison Co. and is 2.43 pounds per kilowatt hour.[1] Fuel costs are as follows:

80 per cent bituminous coal at 0.0872 cent per pound=$1.75 per ton of 2,000 pounds.

20 per cent anthracite coal at 0.1277 cent per pound=$2.55 per ton of 2,000 pounds.

Average cost at 0.085 cent per pound=$1.90 per ton of 2,000 pounds.

	N. Y. Edison.		P. G. & E., San Francisco.		Long Beach, power generated.	Redondo, power generated.
	Power sold.	Power generated.	Power generated.	Power sold.		
	I.	II.	III.	IV.	V.	VI.
Labor	0.086	0.064	0.225	0.165	0.050(a)	0.054(a)
Fuel	0.335	0.252			0.264	0.296
Supplies	0.029	0.022	0.731	0.537	0.022(a)	0.022(a)
Repairs	0.064	0.048	0.104	0.076	0.020(a)	0.028(b)
Total	0.514	0.386	1.060	0.778	0.356	0.400(b)

Cap. load factor 23 per cent.

[1] Apparently on basis of bituminous coal.

[2] Operating efficiency, 85 per cent of maximum efficiency or 85 per cent of 290 kilowatt hour per barrel of oil=246 kilowatt per barrel of oil—oil at 65 cents.

[3] Operating efficiency, 220 kilowatt hours per barrel and maximum efficiency 258 kilowatt hours per barrel of oil—oil at 65 cents.

(a) Assumed. (b) From figures given in Journal Electric Power and Gas.

Water-power costs. Borel Station, P. L. & P. Co., Los Angeles.

Production [1]	0.0[illegible]
Maintenance	0.0[illegible]
Transmission	0.037
Total	0.128

Niagara plant producing power at around 0.2¢.

Selling to Ont. Hydroelectric Co. for 0.022¢ is delivered at 60,000 volts and 0.2¢ if delivered at 10,000 volts.

Capital costs of steam plants on basis of Mr. Lincoln's assumption, and actual ratios of capital charges to generating costs in certain steam plants.

Plant.	Generating cost in cents per kilowatt hour.	Capacity load factor.	Capital cost per kilowatt on Mr. Lincoln's assumption should be for—		Probable actual capital cost per kilowatt.	Interest charges, cents per kilowatt hour generated at—		Ratio of interest charge at 6 per cent on capital cost to generating cost at—	
			100 per cent c. l. f.	Actual c. l. f.		100 per cent c. l. f.	Actual c. l. f.	100 per cent c. l. f	Actual c. l. f
		Per cent.						*Per cent.*	*Per cent*
N. Y. Edison	0.386	23	$504	$129.70	$50	0.034	0.148	8 8	38
P. G. & E.	0.778	31	1.138	352.80	130	0.089	0.287	11 4	37
Long Beach	0.356	23	521	119.80	50	0.034	0.148	9 5	42
Redondo	0.400	62	585	362.70	65	0.038	0.061	9.5	15

[1] See showing made by P. G. & E. given in House hearings, pp. 393 and 394, in which cost of steam generating stations in San Francisco is given as $3,577,238. Assuming that this figure includes cost of 15,000 kva turbo unit then being installed, the capacity of the station was 27,500 kva, costing $130 per kva.

Comparison of annual operating charges and capital investments per kilowatt for hydro and steam plants under the operating conditions of the Southern California Edison Co.'s system, and on hydro and steam generating costs at Borel and Long Beach, respectively.

[A. Assuming actual generating costs and installation costs at Long Beach $50 per kilowatt.]

	100 per cent capacity load factor.		Actual load factors	
	Long Beach.	Borel.	Long Beach.	Borel.
Annual interest on investment per kilowatt installed	$3.00	$23.00	$15.00	$[illegible].10
Interest charge per kilowatt hour	$0.00034	$0.00262	$0.00170	$0.00[illegible]
Generating cost per kilowatt hour	$0.00356	$0.00128	$0.00356	$0.00128
Total cost per kilowatt hour	$0.00390	$0.00390	$0.00136	$0.00[illegible]
Annual interest capitalized at 6 per cent	$50.00	$380.00	$250.00	$585.00
Capacity load factor	1.00	1.00	0.20	0.69
Kilowatts installed per kilowatt generated	1.00	1.00	5.00	1.45
Cost per kilowatt installed [1]	$50.00	$380.00	$50.00	$400.00

[B. Assuming generating costs at both stations same as at Long Beach, and installation costs at Long Beach $50.]

	Actual load factors.	
	Long Beach.	Borel.
Annual interest on investment per kilowatt installed	$15.00	$15.00
Interest charge per kilowatt hour	$0.00170	$0.00170
Generating cost per kilowatt hour	$0.00356	$0.00356
Total cost per kilowatt hour	$0.00526	$0.00436
Annual interest capitalized at 6 per cent	$250.00	$250.00
Capacity load factor	0.20	0.69
Kilowatts installed per kilowatt generated [2]	5.00	1.45
Cost per kilowatt installed [2]	$50.00	$172.00

[1] Compare with 0.372 for Redondo, 0.136 for Long Beach, 0.702 for S. F., 0.338 for N. Y.

[2] Assumed actual cost for Long Beach and allowable cost at Borel in order that generating plus capital costs shall be equal at the two stations.

Mr. MERRILL. I have here a few figures as to the cost of those plants. The Nevada-California Power Co.'s plants on the east side of the Sierras, according to testimony presented before the Nevada Railroad Commission, cost $190 per kilowatt. Mr. Brackenridge said the first Kern River plant cost $3,000,000 for 20,000 kilowatts—that is, $150 a kilowatt. The new Kern River plant, with its transmission lines, is to cost $6,000,000 for 30,000 kilowatts, or $200 a kilowatt.

Mr. Ward said in his testimony that the Big Creek plant of the Pacific Light & Power Co., which has 70,000 kilowatts, costs $12,500,000—that is, $180 a kilowatt. He says the ultimate development at that plant, 200,000 kilowatts, would cost $60,000,000, or $300 per kilowatt. He also states that the total development to date, which is about 84,500 kilowatts, cost $31,000,000, or $370 per kilowatt.

Mr. Britton, in his testimony, stated that the costs of their water-power plants varied from $150 to $200 per kilowatt as the station cost; to which must be added probably $50 to $75 additional for cost of transmission.

Mr. Lincoln said that if a steam plant can be built for $50 per kilowatt, you can not afford to invest in hydroelectric plant more than $100 per kilowatt; while these figures show that if a steam plant costs $50, you can afford—or at least these corporations have invested from three to seven times as much per kilowatt in hydro plant as they would need to invest in a steam plant—and they are still continuing to do it.

Senator CLARK. That is because the cost of operation is so much less in the case of water power than for steam power.

Mr. MERRILL. That is because, under the operating conditions of hydro and steam plants, it is always advisable to operate the hydro plant on the base load and to let the steam plant take the peaks, as shown in that diagram.

Senator CLARK. That would be particularly true in California, where the operation of steam plants is so expensive.

Mr. MERRILL. The operation of steam plants is not so expensive there.

Senator CLARK. I am speaking of the operation with coal as fuel.

Mr. MERRILL. They do not use coal in California.

Senator CLARK. Well, I know; but there are many places in California where they can not use oil as cheaply as they can coal.

Mr. MERRILL. It is when you are carrying a steady load that you can best afford a hydroelectric equipment, because the operating expenses are low; but if it is necessary to put in an installation that will be idle for a large part of the time, that will take only peaks for the day or peaks for the year, it is advisable to use something that has a low capital cost.

Senator SMOOT. That is what they always have done, and always will do, because it is cheaper—to use steam in those cases.

Mr. MERRILL. They have to do it; but it does not follow from these circumstances that steam is cheaper than water power on the average, but that it is cheaper under extreme conditions or for purely peak-load service.

Senator SMOOT. And there always will be peak loads.

Mr. MERRILL. Yes; there always will be.

Senator SMOOT. And steam will always be used in carrying those peak loads.

Mr. MERRILL. Now, discussing for a few moments some of the features which——

Senator CLARK (interposing). Let me ask you this question now: I am a little curious about it, although it has nothing particular to do with what you are discussing: You have stated in one part of your remarks, as I understand, that all of these companies do develop above their demands?

Mr. MERRILL. Yes; there may be a few small companies that have not done so, but the large companies are developed very much above their demands.

Senator CLARK. Well, this is all news to me. Where they develop over their ordinary demand, what would be the occasion of their installing steam power at all?

Mr. MERRILL. Well, in many cases, the steam power was in there before they put the extra hydro on.

Senator SMOOT. There is another reason, because something may happen to the transmission lines.

Mr. MERRILL. Yes; you have to have a certain amount of reserve as security to your customers.

Senator CLARK. I understood you to say that they had 40 per cent reserve already.

Mr. MERRILL. They have 40 per cent reserve in steam and hydro together, and that is more than is necessary.

Senator CLARK. In steam and hydro together?

Mr. MERRILL. Yes. But they hope in future years that the reserve will not be so great. They hope to dispose of this water power which is in excess at the present time. This is particularly true of the Pacific Gas & Electric Co. and the Pacific Light & Power Co.

It seems to me that the two essentials from the standpoint of the general public in connection with power development are satisfactory service and reasonable rates, and that, as far as legislation affects matters of this sort, for my part, I see no warrant for anything that does not, either directly or indirectly, lead to either one of these two essentials of power service.

To secure these results, and particularly to secure conditions under which reasonable rates can be granted, the first consideration of all is cheap capital; and to get cheap capital you must protect the investment; you must give conditions under which adequate return may be received; and you must provide certainty and reasonableness of the conditions of the grant.

The first consideration in the protection of the investment is the certainty of tenure. The great fault of the present law has been not so much that the discretion has been abused as that people have feared that it would be abused. The fear that it might be abused has been taken advantage of by people who have invested in requiring higher interest rates on the capital and greater discounts. This is but reasonable, for no man who is putting out his money at interest takes chances unless he is paid for those chances.

Three forms of grant might be given. We have tried the permit, and I think we all admit that the permit revocable at will, whether theoretically or practically, is insufficient.

Second, we might grant, as some have suggested that we grant, a fee title to the land. No doubt that would protect the investor; but there are some of us who fear that it might not protect the consumer. In any event, it is not necessary for the full protection of the investor.

The third form is the lease. Such a lease should be of sufficient duration to permit of realizing the expected returns upon the undertaking; the conditions affecting the extension of the lease or the taking over the property should be such as to fully protect the investment. I do not believe that if a grant of such form is made, there will be the slightest difficulty in securing all the capital that is needed for hydroelectric development.

The period of the lease has been set in the bill at 50 years. Although that is an arbitrary period, it is the one that has been commonly used in the department. No objection that I know has been raised against it; it has been generally conceded a reasonable period. It is about twice the general term of bond issued.

Senator STERLING. Under the present law, have the leases been for a definite time?

Mr. MERRILL. The leases under the present law have been issued by the Agricultural Department for 50 years.

Senator SMOOT. Some of them are for 40 years.

Mr. MERRILL. A few years ago, they were for 40 years; and then, at the request of the permittees they were extended to 50 years.

This bill provides for a revocation of the lease only by judicial action. There is a certain danger in connection with that, on account of the possibility, in fact the probability, that leases may be held in a great many cases where there is no intention of development; with the result that many power sites will be held undeveloped and unused under leases revocable only by a proceeding in court. This will have the effect of preventing other from getting in——

Senator CLARK. With the wide discretion that is given to the Secretary of the Interior in this bill, could he not provide against that by requiring the filing of satisfactory proofs, or satisfactory guaranties that the development would be had?

Mr. MERRILL. Yes; it could be provided in some such way, by requiring the giving of a bond, for example, and requiring the man who had not developed either to relinquish his lease or to forfeit his bond.

Senator CLARK. Well, with the broad discretion given in this bill to the Secretary of the Interior, could not that be covered?

Mr. MERRILL. I am not sure as to that.

Senator NORRIS. He would have to go into court, would he not?

Mr. MERRILL. He would have to go into court in either event—either to sue on the bond or to annul the lease.

Senator CLARK. If a man accepted a lease under the present conditions, it might be difficult to finance the enterprise.

Mr. MERRILL. That is the difficulty that exists at the present time, not only in handling rights of way on the public lands, but some of the Western States are finding serious difficulty in connection with their water rights.

Senator CLARK. Let me ask you this question: Is it not ordinarily the case, in contracts between private citizens, that the courts finally determine whether the contract has been kept or not?

Mr. MERRILL. That is true.

Senator CLARK. And as a business proposition, why should it be different in case of the Government? That is a business proposition, pure and simple.

Mr. MERRILL. That is true. Perhaps we might consider this in connection with the proposition that the right should be mandatory, and the term of permit fixed.

Senator CLARK. Yes.

Senator ROBINSON. Well, the Secretary could require a cash deposit sufficient to insure development within a given time, and under conditions that he might fix, could he not?

Mr. MERRILL. He could do that.

Senator ROBINSON. That is done in many municipalities, I am informed.

Mr. MERRILL. Yes; and we are doing it under the regulations of the Department of Agriculture, but we have to meet the objection that is raised that the Government by making such a charge is stopping development.

But, taking these three matters into consideration together, I am inclined to believe that the gentlemen who are asking for an inflexible law, without discretion, and an inflexible term of permit, will be the first ones to wish they had gotten something else; that they will suffer ten times as much from that inflexibility as they would from any abuse of executive discretion.

Senator CLARK (interposing). Let me ask you just what you mean by "inflexibility"? There is no one that I have heard say before the committee that this provision should be written into the law; there is no one that I have heard say that no discretion should be left in the Secretary; they do believe that where a man has complied with the law, and with the rules and regulations that may be made under the law, then it should be mandatory on the Secretary to give the lease.

Mr. MERRILL. Of course, if you can leave sufficient latitude to make rules and regulations, it makes no difference whether it is mandatory or not—the discretion comes in making the regulations.

Senator CLARK. Well, the discretion is in granting the lease; that is the discretion that is complained of—that it is left in the discretion of the Secretary of the Interior to say that A should have a lease and B should not, although B may have been the prior applicant and complied with the terms of the law and the regulations—the contention of some is that, under those conditions, B, having complied exactly with the terms of the law, and having complied exactly with the rules and regulations of the department laid down up to that time, the Secretary of the Interior then should, as a matter of course, grant him a lease.

Mr. MERRILL. Possibly that might happen, but in 99 cases out of 100 it would not.

Senator SMOOT. Well, how about the hundredth case?

Mr. MERRILL. I will give you an example of the hundredth case: The Sierra & San Francisco Power Co. has this development on the Stanislaus River, and they say that they have there an investment of $100,000,000——

Mr. MITCHELL (interposing). $12,000,000.

Mr. MERRILL. Well, $12,000,000. Not many years ago an applicant came before the department for a power site on the Stanislaus River, claiming that his water right was superior to that of the Sierra & San Francisco Power Co. He filed that application, and his papers showed that his project would go completely around the plant of the Sierra & San Francisco Co. Now, should that application have been granted?

Senator CLARK. Well, I am not familiar with the circumstances, nor would I be qualified to judge if I were, and I have no opinion to express; the opinion I am trying to get at is the opinion of others who are in a position to determine those questions.

Mr. MERRILL. What I meant is that that is an example of what might happen under a mandatory provision. There would be full compliance with the regulations—everything done under the regulations; but that would have killed the plant of the Sierra & San Francisco Co. if that had been granted. It was not granted until it was amended to such a form as to return the water to the stream above the intake of the prior user.

Senator CLARK. Then does it not go back to the proposition that the matter of the use of the water is decided under the terms of the State law?

Mr. MERRILL. It is always decided under the terms of State law.

Senator CLARK. Then, if the terms of the State law provided that this man to whom you referred should have the water for which he had applied, I do not see how the Government is going to override that, no matter whether it is good or bad.

Mr. MERRILL. The terms of the State law did not say anything about where the water should be taken.

Senator CLARK. Well, he could not get the water to take across there unless the State would permit him to do so.

Mr. MERRILL. The laws of California at that time provided nothing more than a method of recording applications. The State did not concern itself whether the water was taken to one place or to another, since matters could be determined only by private suit. The State law of California is different today; but there are many other States in which the present practice is like the former practice of California.

Senator CLARK. Then his application would not have received consideration under the State laws?

Mr. MERRILL. Would not to-day; but it did then.

Senator CLARK. Well, do I understand you to say that this bill ought to be such as to give the General Government the authority to say where water shall travel?

Mr. MERRILL. I think that the authority ought to be sufficient to require and permit the Secretary to decline an application in such a case when it was perfectly patent on its face that it was simply a "hold-up" game against the company operating there, when the State could not of itself take any action, and the operating company's only recourse was an appeal to the court and expensive litigation.

Senator CLARK. What constitutional authority, if any, has the Government——

Mr. MERRILL (interposing). The only authority under the present law is simply to grant or not to grant.

Senator CLARK. Well, that does not answer the question I was going to ask: Is it your belief that the Government has constitutionally the right to determine where and how the waters of the streams shall be used?

Mr. MERRILL. I do not know what it has as a legal question; but as a practical question I believe that the State should determine it.

Senator CLARK. That is what I wanted to get at.

Mr. MERRILL. I am perfectly in accord with that proposition.

Senator CLARK. Well, if the State has a right to say that this water shall traverse a certain line after having been appropriated under the laws of the State, where would we get a foundation for the authority of the Government to control?

Mr. MERRILL. The only thing that was required to be done under the State laws was to file a notice; the State thereafter paid no more attention to it.

Senator CLARK. You are entirely incorrect on that; the State follows the water all the way.

Mr. MERRILL. It does in your State.

Senator CLARK. Yes.

Mr. MERRILL. It did not in my State until two years ago and it is not doing it in many States to-day.

Senator CLARK. It does in nearly every State now.

Senator ROBINSON. What is your State?

Mr. MERRILL. California.

Senator CLARK. The fact of the matter is, Mr. Merrill—I do not know whether you are familiar with it, I assume, however, that you are—that more attention is being given to water legislation and to controlling water rights in a proper way in those western States than to any one single subject, and perhaps as much attention as to all other general subjects combined.

Mr. MERRILL. I think you are probably correct in that; but still some of the States have very little to do with it, at least as far as actively administering it is concerned.

Senator CLARK. And your idea is that where this——

Mr. MERRILL (interposing). Where the State has not determined what it will do——

Senator CLARK (interposing). You think that where the State has not legislated as to its water, the general Government should legislate on the subject?

Mr. MERRILL. I do not think I would want to carry it so far as that. In the single case——

Senator CLARK. Well, I will put it differently: Where the State has not controlled the matter properly, do you think the General Government should control; is that the idea?

Mr. MERRILL. Well, possibly—but I do not want to make even that too broad. I do believe, however, that in granting leases of the land the Federal Government should take upon itself the determination of the equation in the case in all instances where the State has not provided any means by which it can act.

Senator STERLING. I want to ask this question before you pass to another point: You are speaking of the power of the Secretary of the Interior. Suppose the lease or permit has been granted and it is alleged that the lease, or the terms of it, have been violated and

that there is cause for declaring a forfeiture; would you believe in conferring upon the Secretary of the Interior the absolute power to declare a forfeiture, or would you leave that to be determined and adjudged by the courts?

Mr. MERRILL. I would never grant to the Secretary of the Interior, in writing a new law, any power to revoke a lease or grant under which an investment had been made.

The danger is in throttling the development of the western lands with leases that are not used.

I have here a list that was prepared for the House committee hearings about a year ago of the number of leases that had been granted in the National forests under the several rights-of-way acts, in which the grant was mandatory. The total number of approved cases was 726. Of this number only 17.6 per cent have ever been used; the balance are staying out there as easements upon the land, that can be canceled only by judicial action, unless the grantee himself voluntarily relinquishes.

I would like to insert this list showing the condition of such grants in the record at this point.

(The statement referred to is as follows:)

		Per cent.
Easements:		
Number of approved cases which had been completed	128	17.6
Number of approved cases which had not been completed	598	82.4
Total number of approved cases	726	100.0
Water power—open cases on July 1, 1913:		
Number of cases in which construction completed	83	58.9
Number of cases in which construction started but not operating	36	25.5
Number of cases (final permits) in which construction not started	22	15.6
	141	100.0
Water power—all cases open and closed up to Nov. 1, 1913:		
Number of cases in which construction completed	109	39.1
Number of cases in which construction started but not operating	35	12.5
Number of cases (final permits) in which construction not started	135	48.4
	279	100.0

Senator NORRIS. Do you have any knowledge as to whether in those cases those rights were acquired under that law for the purpose of circumventing somebody else?

Mr. MERRILL. Not necessarily.

Senator CLARK. May I ask you this question: Do you know whether in any number of cases those relinquishments have been requested.

Mr. MERRILL. I think they have, and that a good many have been relinquished.

Senator CLARK. Yes.

Mr. MERRILL. My whole point now is this: That it is a cumbersome proceeding at the best to require a judicial revocation of a lease or a grant that has been absolutely unused.

Senator NORRIS. I take it that your idea is there ought to be an amendment to the bill that would provide that in case a lease were made and no development took place under it within some specified

time, which should be stated in the bill, the Secretary could revoke it arbitrarily, without going into the courts?

Mr. MERRILL. It would be an improvement in the bill. But I would not have any revocation take effect other than through the court after the investment had been made.

Now, I should like to read this statement from the report of the State engineer of Colorado for the year 1911–12, to show what have been the conditions under some of the State water laws where the provisions are practically mandatory upon the officials to grant the water right. The State engineer says:

> There should be some provision for the automatic expiration of claims which are not followed by active work. There are now about 17,000 filings in the State engineer's office. Many of these make three or four claims each. It is safe to say that fully 10,000 of these filings have never been followed up by any work whatever indicating the good faith of the claimant. Their very existence, however, is a cloud upon the title of many bona fide claimants. If anyone promoting an irrigation project in good faith succeeds in interesting outside capital to such an extent that the proposed investors send an attorney to look into the local phases of the scheme, such an attorney will find thousands of claims antedating those of the scheme under investigation, and to these he will attach their face value. If he be from one of the Eastern States, it is useless to argue that the claims are of no importance. He finds them on the record, they antedate the claims on which his clients are asked to invest, and to him they are clouds on the title to the water which it is proposed to acquire. Many a meritorious project has been adversely reported on grounds no more substantial than this. A stringent regulation requiring actual construction work will not deter a bona fide claimant, but, like the increase in fees, it will be one more obstacle in the way of those who would speculate in the natural resources of the State.

Senator CLARK. I think that probably is true, and I agree quite fully with the conclusions. When was that report made?

Mr. MERRILL. That report was made in 1912.

Senator ROBINSON. Is that the Idaho law?

Mr. MERRILL. No; Colorado.

Mr. MITCHELL. The Idaho law is very similar to that.

Senator ROBINSON. Well, of course, if the power to revoke under any circumstances were granted, it should protect those cases where the investor has gone ahead far enough to secure his capital, and yet has not begun actual development.

Mr. MERRILL. Yes; I would protect absolutely, by the terms of the bill, every man's dollar that has been put into it.

Senator ROBINSON. He might not have put a dollar into it, in the technical sense: he might not have begun development, but he might have gone to a great deal of trouble and expense in connection with it in procuring his loan, for example.

Mr. MERRILL. Yes.

Senator ROBINSON. Do you have any amendment there that you could suggest to meet that situation?

Mr. MERRILL. No; I have no amendment to suggest.

Senator NORRIS. Have you any idea in your mind what that term ought to be? I mean, how much time should be given to commence actual operations and in which the Secretary should have the right to revoke for neglect to begin operations?

Mr. MERRILL. The practice in the Agricultural Department is to grant terms which appear to be just under the circumstances. That is, if it is a large development that requires a good deal of preliminary expense in the construction, the period may be several years.

The periods for beginning construction vary, from about six months as a minimum to about three years as a maximum. And no permit issued is revoked even for failure to begin within the time stated, if there is any probability that use will be made of the right of way.

Senator CLARK. I think that the process complies quite closely with the laws of private appropriation in the various States.

Mr. MERRILL. Yes. The new law of California provides that the first thing they get from the State when they want an appropriation is a permit only. Under that permit they are required to make certain development within a certain time, and not until that development has actually been made and the work is approved by the State does the man get his lease.

Now, between that regulation which might be called a stringent regulation, giving no right until the plants are entirely constructed, and that which gives a right on the mere filing of a map there is a wide difference.

Senator NORRIS. The man does not get a lease in California, does he?

Mr. MERRILL. Yes; he gets a lease in California.

Senator NORRIS. From the State?

Mr. MERRILL. Yes; from the State.

Senator NORRIS. Well, the State does not own the land on which the development takes place?

Mr. MERRILL. No; that is for the water. Under the present law in California, which was passed by referendum in November last, all water rights are subject to lease, particularly power rights, for a term of years.

Senator NORRIS. And in order to operate under that law, in connection with this bill if it were passed, the man would get a lease from the Government of the land and a lease of the water from the State?

Mr. MERRILL. Yes; or as the law is now written he would first get a permit from the State for the water, and if he did not make good he would lose his permit and his lease would not be granted.

Senator NORRIS. And your suggestion is that there ought to be some more immediate method than that of court procedure, where the development has not been made?

Mr. MERRILL. Yes.

Senator NORRIS. I think that is a pretty good suggestion.

Senator CLARK. You made a suggestion that the man would not hold his permit, and he would lose his lease. Is it the practice of the department to grant a permit before right to the use of the water has been secured?

Mr. MERRILL. No; the practice has always been the other way.

Senator CLARK. That is what I thought.

Mr. MERRILL. No permit is granted unless the State has already granted the permit for the use of the water.

Senator CLARK. That is what I thought.

Mr. MERRILL. I will insert right here the form of agreement between the Department of Agriculture and the State Water Commission of California in relation to handling the water rights and the right-of-way applications on the national forests.

Briefly, the agreement states that whenever an application for a water right is filed with the State commission the commissioner shall

notify the district forester at San Francisco. Whenever an application for a right of way is filed with the district forester, who is the field officer of the Forest Service, he shall notify the State commission; that the two shall then get together and decide upon the terms of that lease; and then that the Forest Service and the State of California shall issue a concurrent lease.

Senator STERLING. You say that agreement is in existence to-day?

Mr. MERRILL. That agreement is in existence to-day between the Department of Agriculture and the State commission.

Senator CLARK. Does that apply only to power sites?

Mr. MERRILL. That applies only to power sites.

Senator CLARK. And not to irrigation?

Mr. MERRILL. No; because the Forest Service has no authority over irrigation plants.

Senator CLARK. I think you are mistaken there.

Mr. MERRILL. Yes, that statement is too broad; it does have that authority in some cases.

Senator CLARK. Yes, the Federal Government has the same right to grant permits for irrigation purposes as it has for water-power purposes.

Mr. MERRILL. It can do so under that same act of 1901; but, practically no applications are made under that act, because an easement can be secured under the act of 1891.

Senator CLARK. Yes.

Mr. MERRILL. This agreement was executed on the 27th day of August last by the State Water Commission of California, and on the 14th of November by the Secretary of Agriculture.

Senator STERLING. Will you insert that in the record?

Mr. MERRILL. Yes.

(The agreement referred to is as follows:)

COOPERATIVE AGREEMENT—WATER POWER—ENTERED INTO BETWEEN THE SECRETARY OF THE UNITED STATES DEPARTMENT OF AGRICULTURE AND THE WATER COMMISSION OF THE STATE OF CALIFORNIA.

For the purpose of facilitating the approval of applications for water rights and for the occupancy and use of national forest land within the State of California for the development of water power, and in order that uniform action may be taken with respect to such applications, the Secretary of the United States Department of Agriculture and the Water Commission of the State of California, subscribe to the following cooperative agreement:

1. Whenever an application for either a preliminary or a final permit for a water-power site is filed with the district forester at San Francisco, Cal., and the evidence of the appropriation of water consists of a notice posted in conformity with the provisions of section 1415 of the civil code of California, immediate notice of such application for a permit, consisting of the name of the applicant, the name of the stream from which the water is to be diverted, the point of the proposed diversion, the date of the notice, and the name of the locator, shall be sent to the State water commission.

2. Whenever an application for a preliminary or a final permit is filed with the district forester, and the evidence of the appropriation of water consists of a copy of an application made to the State water commission, or a permit from said commission under the existing water-power act, it will be sufficient to inform the commission that such application for permit has been filed with the district forester.

3. Whenever an application is made to the State water commission for a permit to appropriate water and the use of such water will in any manner necessitate the occupancy and use of any national forest land, immediate notice

of the filing of such application shall be given to the district forester at San Francisco. Such notice shall give the name of the applicant, the stream from which the diversion is to be made, the point of the proposed diversion, the date of the notice, the name of the locator, and a description of the lands that may be within such national forest.

4. No application for a water right involving the use of national forest lands will be approved by the State water commission prior to notification by the district forester that a complete application (with the exception of evidence of water appropriation) for the use of the national forest lands has been filed in conformity with the regulations of the Secretary of Agriculture.

5. If the application filed with the district forester, as provided in paragraph 4 hereof, is for a preliminary permit, the State water commission will defer final approval of any application for water right until notified by the district forester that a complete final application (with the exception of evidence of water appropriation) has been filed in accordance with the regulations of the Secretary of Agriculture, or that a preliminary permit containing permission to do construction work has been issued. The district forester will confer with the State water commission before arranging the terms of any preliminary permit and will furnish the commission with copies of such permits immediately upon their issuance.

6. If the evidence of the appropriation of water filed with an application for a final permit for a water-power site consists of a notice posted in conformity with the provisions of section 1415 of the Civil Code of California, such permit will not be issued until the State water commission either approves such appropriation or disclaims jurisdiction. If the applicant relies upon an appropriation under existing law, no final permit will be issued until notice of the approval of the commission has been filed with the district forester.

7. No preliminary permit will allow construction upon national forest land except in an emergency or to comply with the State law, and then only upon approval of the State water commission.

8. If the time for beginning and completing construction under any final permit issued by the Secretary of Agriculture is different from that granted by the State water commission such difference shall not be deemed to affect in any way the permittee's liability under the State law or the approval of the commission, or to free him from the cancellation of his permit if he loses his water right under the State law.

9. If any permittee shall lose his water right because of failure to begin construction in accordance with requirements of the State law and of the approval of the State water commission, such loss of right when certified to by the said commission shall be deemed sufficient cause for revocation of the permit.

10. If either the district forester or the State water commission shall fail to give notification of any action as contemplated herein, within sixty (60) days of the receipt of written report of applications pending, the officer or office so reporting may take action without waiting further for such notification.

In witness whereof this cooperative agreement has been executed at San Francisco, Cal., by the State Water Commission of California, on the 27th day of August, 1914, and at Washington, D. C., by the Secretary of United States Department of Agriculture, on the 14th day of November, 1914.

(Signed) CHAS. D. MARX,
HAROLD S. POWER,
S. C. GRAHAM,
D. F. HOUSTON,
Secretary of Agriculture.

Now, as far as the Department of Agriculture is concerned, under the present law, it is willing, and more than willing, to enter into such an agreement with any State that has the machinery to carry it into effect; and in those States where there is no such machinery, we simply accept whatever right the man gets from the State at its face value, and the man must secure that before he can get a right of way under the act of 1901.

(Thereupon, at 12 o'clock noon, the committee took a recess to 2 o'clock p. m.)

79917—15——38

AFTER RECESS.

The committee met at 2 o'clock p. m.

STATEMENT OF MR. O. C. MERRILL, CHIEF ENGINEER, FOREST SERVICE, WASHINGTON, D. C.—Continued.

Mr. MERRILL. There is one other feature of the matter I was discussing at the close of the morning session relative to a fixed term grant. There might be no objection to a fixed term if a single lease covered everything that one company held under lease; that is, if additions to plant were covered by an amendment to the original lease rather than an entirely new lease. I do not understand that could be done, as the bill would read, if amended, to provide for a fixed term only. We have many cases of permits which have been issued by the Department of Agriculture for a certain unit of development. Later on the same permittee comes in and asks, for example, for a reservoir to increase the amount of power that can be turned out in the original development, and the next year he comes and asks for an additional transmission-line permit, and the year after he will come in and ask for another transmission line. If in every instance it would be necessary to grant a 50-year permit, he would have the main plant lease expiring, say, in 1965, and the reservoir lease in 1970, one of the transmission lines in 1971, and another one in 1972.

Now, under the terms of the bill as it stands, there would be the objection, if the Government or another lessee should take over the main plant in 1965, that it could not take the remainder because the leases had not expired. What is going to happen? The lessee has property that is not subject to be taken over until the lease expires, and either one of two things is certain to happen; either the leases must be extended in order that they may all expire on the same date or they can not be taken over at all. With such probabilities in view the reasonable thing to do is to have the subsidiary leases expire at the same time the main lease expires, and that can not be done if the law is such that every lease must be for 50 years.

Senator WORKS. That might be corrected by making the subsidiary lease expire with the expiration of the original lease.

Mr. MERRILL. Yes; that would cover it, Senator.

Senator NORRIS. That would then prohibit a man taking any contracts that would run any number of years, in case the lease was about to expire.

Mr. MERRILL. It would simply mean that all leases for properties constituting a part of the main unit would have the same date of expiration.

Senator NORRIS. Yes; but suppose the lease had run 45 years; then they could not make a contract extending longer than 5 years, could they?

Senator WORKS. You do not understand, I think, Senator Norris. He is talking about leases where they ask for additional leases.

Senator NORRIS. Oh, from the Government?

Senator WORKS. Yes.

Senator NORRIS. Oh, yes; I misunderstood you.

Mr. MERRILL. The provision that is suggested is that the subsidiary lease shall expire with the main lease, and that can be provided.

That, and the consideration, that I mentioned before recess, ought to be worked out in connection with a mandatory period of lease, if that sort of lease is to be provided for in this bill. It is my opinion that if a mandatory period is provided these gentlemen who will come up for leases will find themselves in a far worse position on account of that condition than by any probable abuse of executive discretion. They are subject to executive discretion in the States now, under the public-utilities laws. There is no mandatory grant of a right of operation in any of the public-utilities laws. The public utility must secure a certificate of convenience and necessity; and that is determined solely by the commission as an executive or an administrative act. The same thing is true under the more recent laws in regard to water rights. They are subject to the administrative action of the officer or commission which has control of the water rights. They are subject at all times to such changes in conditions of service as the State public-utilities commission may direct. They are subject, from start to finish, to executive discretion.

In addition to the requirement as to the certainty of tenure in order to protect the investment it is also necessary that if the properties are taken over the investment shall be returned. It is my opinion that the cost basis of rate regulation is the one that is coming to the front in all public-utility legislation. You are probably all familiar with the Chicago traction settlement, in which the properties were valued at the time of settlement, and then the original appraised value, plus any additions to capital account are paid for by the municipality if it takes the property over and there is no unearned increment and no intangible value. The same thing is true under the California accounting system of public utilities operating in that State, that cash value is all that may be entered upon the books. The companies are required to amortize out of earnings all intangible values, including water rights, and they are supposed to amortize out a large part of the land values.

The provisions of this bill as it is drafted consider three classes of property—appreciable property, which shall be taken over at cost; depreciable property, which shall be taken over at its fair value; and intangible property, for which nothing shall be paid.

Intangible property may cover several items. The usual items are what is known as going value, franchise value, and good will. I think it is sufficiently well settled by the decisions of both the courts and the commissions that a public utility has no good will for which it can expect a return when the property is taken over.

As far as the franchise value is concerned, if the properties are not taken over until the franchise expires there is no franchise value left to be paid for.

As far as the going value is concerned, the principles that are laid down by the commissions in the decisions is that the going value which shall be paid for is the cost of developing the business. If that cost of developing the business has been paid out of the earnings during the life of the grant or franchise there is no going value to be paid for, and in cases where the going value is permitted to be capi-

talized the utility is required to amortize that capitalized value out of its earning while the plant is in existence.

Senator NORRIS. Now, as to the franchise value, it seems to me there would be a distinction if the property was to be taken over by a municipality that gave it the franchise value or by an independent concern that bought it for an investment. In the one case it ought to be considered and not in the other, and ought it to be considered in making rates as against the municipality that gave it the franchise value?

Mr. MERRILL. The practice is, Senator, that where a franchise has been granted for a nondeterminate period, that is what is called a perpetual franchise, even though the municipality that grants that franchise takes that property over, it will have to pay the value.

Senator NORRIS. What justice is there in that?

Mr. MERRILL. Simply on the consideration that the franchise is a property.

Senator NORRIS. If the person that gave it to them should take it over, I do not understand why they should be paid for it. Of course if they get something for it, if value was paid for, it would be a different thing.

Take the street-car company in the city of Washington and give it a franchise, we will say; if the city should take it over, why should the city be required to pay for something that it itself gave without consideration?

Mr. MERRILL. I am not arguing on the justice of the proposition; but apparently the decisions of the courts and of the commissions respect it. I do not think the franchise value, under such circumstances, ought to be paid for, and furthermore, I do not think that a franchise of that form should issue.

Senator NORRIS. However, there would have to be some franchise issued.

Mr. MERRILL. Yes.

Senator NORRIS. But if an outsider bought it from the person to whom it was given, then different considerations arise, and of course they ought to be paid for.

Mr. MERRILL. Under private purchase it can not be taken by condemnation. Under the provisions of the Wisconsin statutes, franchises are indeterminate—not perpetual, but indeterminate. They may be taken over at any time on payment of the assessed valuation by any municipality of the State. There is no franchise value, because the moment a municipality decides to condemn, that ends the franchise and there is nothing to take.

The provision that appreciable property shall be paid for at cost rests upon the proposition of return of investment, that nothing shall be paid for which has cost the lessee nothing. Increase in land values are not due to any direct expenditure by the lessee; they are due to the growth of the community. In this growth the lessee, of course, has had a part, but any expenditures made by the lessee, and which have indirectly resulted in the development which has enhanced land values, are its own operating expenses which the public has paid out of rates for the service purchased.

Mr. Ward in his testimony stated that the lands which his company had purchased in Los Angeles and vicinity had appreciated 500 per cent in value. The public utilities commission of Nevada, when

it valued the properties of the Nevada-California Power Co., admitted into the valuation as the unearned increment on its water rights and its permits and easements in the Mono National Forest $1,186,615 over and above what it had cost the company in dollars and cents.

Senator CLARK. What case was that?

Mr. MERRILL. That was in Nevada. Or, 23 per cent of the entire valuation of the property was in the intangible or unearned increment in these water rights and rights of way.

Now, I think it goes scarcely without saying that if we can grant a lease that shall be definite in its terms, if we can provide under the terms of that lease that when the property is taken over it shall be taken over at the investment that was honestly put in, that there will be not the slightest difficulty in securing capital that is necessary on favorable terms without any payment for unearned increment or for intangible values. Is that correct? Do you agree with me?

Mr. MITCHELL. That is correct.

Mr. MERRILL. Then, what should be added under an act of this sort to insure the investor that the money actually put in will be returned? I am not certain whether proper provision has been made with respect to depreciable property, which, under the terms of the bill, is to be taken at its fair value.

As I have said before, I believe the proper basis is to purchase on the basis of actual cost and to allow rates of return on that. Now, if the depreciable property which is to be taken over—the structures, plant, the transmission line, etc.—at the end of the period has its fair value represented by the investment less any amount that has been amortized out of the earnings, then the investment is fully protected.

Senator CLARK. Why should the Government or anybody else pay more than the present value of structures, for instance?

Mr. MERRILL. For this reason only, Senator Clark, that you should not have one basis of purchase for one class of property and an entirely different basis for another class of property. This bill proposes to take over certain classes of property at their original cost and others at their fair value. I do not know that the provision with respect to the latter class is clear. It might be possible to take over these other properties at less than cost. My idea is that the proper basis through it all is to take over all properties at fair cost.

Senator CLARK. Suppose there was a general depreciation all along the line.

Mr. MERRILL. If the property has been handled as it should have been handled, if it is handled under the accounting systems proposed and provided by our recent public-utilities laws, that depreciation will have been written off by the end of the period by amortizing out of the earnings the difference between the original cost and the market value at the date of purchase.

Senator CLARK. Well, that is not a universal practice.

Mr. MERRILL. No; it is not.

Senator CLARK. I do not see why we should pay the depreciation any more than the Government should pay for what you might call obsolescence; there is machinery thrown aside as being obsolete.

Mr. MERRILL. I presume that you think that the public should pay for it.

Senator CLARK. No; I think, where anybody sells anything, if it is not worth as much as it cost he ought not to get what it cost for it.

Senator WORKS. The depreciation of the plant is taken into account in determining the rates.

Mr. MERRILL. Yes; the depreciation that the plant is to undergo from year to year is included in a depreciation reserve which is paid for out of earnings. As I understand it, the underlying principle of the public-utility regulations of California, which I am most familiar with, is that the rates shall be based on investment.

Senator CLARK. Yes; but under the California law they do not proceed on that proposition, do they? I have understood all along, while the California law was being discussed, that they proceed under the question of actual value.

Mr. MERRILL. They do this, Senator: Of course, in starting out they are attempting, or proposing to attempt, to value the properties as already in existence to-day, and start from that point, just as in the Chicago Traction matter, and hereafter any additions to the property shall go into the capital account at cost, and that any difference between the actual value and the cash cost shall be written off by depreciation reserves.

That is my understanding of the California law. If I am incorrect in that, I would like to be corrected.

Mr. SHORT. I think that the decision of Mr. Thelen, who wrote that opinion, goes on to the extent that it is desirable, where you can and where the actual investment represents the actual value, to use that as a basis; but the commission expressly adheres to the standard that the ultimate standard is to be the present-value standard; and they have not changed the law or the Supreme Court's opinion, Mr. Merrill.

Mr. MERRILL. I was arguing not so much from the decision but from the plain provisions of their accounting system.

Senator WORKS. That does not result from any statutory provision.

Mr. MERRILL. Returning to the discussion of the bill. If cost, less depreciation paid for amount of earnings, or something similar is not provided for, you will have this situation, that no lessee can afford to make investments for increases in the property toward the end of the lease period, because he must run the risk of unamortized depreciation and obsolescence. He may not have had an opportunity to write off that obsolescence out of earnings, and if it is not written off out of earnings he may have, at the end of the period, a value, we will say, of 80 per cent of the original cost and have been able to retire out of earnings only 10 per cent of cost, with the result that if the plant is taken over at depreciated value there will have been a clear loss of 10 per cent.

Senator CLARK. That condition would be remedied by giving preference rights that ought to be given.

Mr. MERRILL. That would help it, yes.

My alternative suggestion that is that in case of taking over the plant the property should be paid for at its fair cash cost less any amount which may have been raised out of earnings held in depreciation reserves, or otherwise; or that the lease should be extended

over such period that this obsolescence can be taken out of earnings to be received during the extended period.

Senator SMOOT. Suppose that took all the earnings and left nothing for depreciation whatever; how are you going to handle that?

Mr. MERRILL. You mean if they had taken all the receipts and put it into depreciation?

Senator SMOOT. No; that it took all their profits to cover depreciation of their plant, then at the end of the 50 years they would get very little, would they not, for the property?

Mr. MERRILL. Yes; but I do not believe anybody is likely to do that sort of thing. I am not speaking of current depreciation which is really an operating expense, but of amortization reserves set up out of earnings to cover the difference between the cash cost and the extended market value at the termination of the lease.

Senator SMOOT. Perhaps the earnings would not be sufficient to pay the depreciation.

Mr. MERRILL. In that case there would not be any depreciation reserves. But under no public-utility regulation that I know of on rates are rates fixed or allowed to be kept at a figure which will not allow of such amortization.

Senator SMOOT. There would be a depreciation of the stock.

Mr. MERRILL. What I said was, it should be taken over at the fair cash cost less amounts held in amortization reserves, which had been taken out of earnings for that specific purpose.

Senator SMOOT. In that case the successful ones would not get as much out of the property as the fellow that was not successful and could not take out any depreciation.

Mr. MERRILL. That may be; but I am assuming that rates are fixed under regulations sufficient to permit of just such retirement.

Senator NORRIS. I do not see how that would follow.

Mr. MERRILL. It simply means that the public is already paying these amortization reserves.

Senator NORRIS. Supposing, Mr. Merrill, under this law some person or corporation had gotten a lease for 50 years, and that during that time improvements and inventions had made transmission lines entirely unnecessary—a supposition that, in my judgment, is not at all unreasonable—for instance, the storage batteries had been developed to such an extent that it was cheaper to store it and carry it in that form than it would be to take it over transmission lines. Suppose the Government, at the end of the 50 years, decided to take over the property. Is it your idea that the Government ought to pay for all those transmission lines?

Mr. MERRILL. My idea is this, in the whole proposition, Senator Norris, that a public utility concern is a semipublic agency, that it not only has the utility responsibilities, but the public has responsibilities as well. I consider that the United States Government acts only as an agent of the people, just as the State government acts; that when the public asks a corporation of this nature to come in and do its business for it, to serve in a semipublic nature, that the public as well as the corporation, has its responsibilities, and the public's responsibilities are these, that it shall protect the investment which is devoted to its service from anything which does not result from fraud or from bad management of the corporation and

that, in the very instance you cite, I, as one of that public who have to pay rates for service, prefer to return to that corporation the unamortized value of its obsolete property rather than to have the corporation take on itself all the risk in contingencies that can not reasonably be foreseen. I think it is cheaper in the end, that we will get cheaper capital to start with, and that the power is going to cost the consumer less.

And in the example that you have cited—and I think Senator Smoot asked the same question some time ago—I would do either one of two things: I would either return to that corporation the unamortized cost of that obsolete property at the time of purchase, or I would extend its lease until it could pay for it out of earnings. I believe anyone will admit that, should the lease be extended, the public would be required to pay for that obsolete property out of rates for the service. It is therefore only a question of whether it shall be paid for in a lump sum whenever there is a desire to terminate the lease and come into possession of the property, or shall be paid for in installments under an extension of the lease.

Mr. MERRILL. Certainly; it does, year by year.

Senator NORRIS. And those are taken into consideration every year in fixing rates, and a certain per cent goes off. But it may be that it happens all at once, almost like a revolution.

Mr. MERRILL. All at once, and near the end of the period.

Senator NORRIS. Take the same case I put a while ago: Suppose a private corporation wanted to sell; you would not expect another private corporation buying it to pay for those things.

Mr. MERRILL. Yes.

Senator NORRIS. Should the public pay any more than a private corporation should pay?

Mr. MERRILL. I doubt if it would even under the example you have given, for against the obsolescence which the private company does not pay for is offset other elements for which it does pay, such as good will.

Senator NORRIS. Yes; that would be proper in the case of a private company.

Mr. MERRILL. It pays the appreciation on the first company's property.

Senator NORRIS. Yes.

Mr. MERRILL. Now, as I have said, I offset against that obsolescence the appreciation of land and the intangible items.

Senator NORRIS. Intangible items are not to be paid for under this bill.

Mr. MERRILL. Yes; that is perfectly true. But it is something that a private purchaser from a private corporation has to pay for.

Senator NORRIS. Certainly. But if the Government wanted to take it over there is not any reason so far as I can see, why the Government should pay for that which itself has given.

Mr. MERRILL. No. But these provisions of this law, as drafted and now before you, not only cut out the value of the lease given and other intangible elements; they not only cut out the appreciation in value of the public land, but the appreciation in value of private lands in connection therewith. It puts it down on a frank basis of return of cash investment, and, to my mind, that is the most equitable basis, and it is the cheapest basis for all concerned.

With the investment protected from start to finish, with the interest rates at which capital can be secured under such conditions and with the amount of development that may be expected to follow there will be brought, in the end, to the public who pays for the service, a less rate than they could otherwise get. It is only on those considerations that I would recommend it.

I have here a diagram and table that may possibly be of interest to the committee, which simply illustrate what is the importance of writing off out of earnings the obsolescence of the property that takes place near the end of a lease or franchise.

Senator CLARK. I think that would be obvious.

Mr. MERRILL. This was prepared in connection with a somewhat different case, where it applied to the properties of the Pacific Gas & Electric Co., on the assumption that they were to be put under lease and the entire property was to be turned over at the end of the lease.

I will leave this here, if any of you care to see it. It simply shows how extremely rapidly the amortization rate runs up toward the end of the period, in property invested toward the end of the period.

Senator NORRIS. I do not understand. What does that indicate?

Mr. MERRILL. This [indicating] is the property of the Pacific Gas & Electric Co. First, this [indicating] is the maintenance charge, a certain per cent, and operation charge, a certain per cent, and this [indicating], in here between those two lines, is the cost of amortizing both the physical property existing at the date the franchise first assumes to start and additions to property thereafter, so that the property shall be returned out of the earnings at the end of the period.

Senator NORRIS. In that case, now, that assumes that the end of the period has been charged off?

Mr. MERRILL. This [indicating]; yes: that the property should be taken over without charge.

Senator NORRIS. Exactly.

Mr. MERRILL. Now, of course, that is not applicable to what we are discussing here, except that it shows that as to any properties that might become obsolete toward the end of the lease it is entirely improbable that the company could have amortized their cost out of the earnings before the end of the lease, and therefore that there would be a direct loss.

Senator SMOOT. You had better put that in the record.

(The diagram referred to, marked "A." will be found at the end of Mr. Merrill's remarks.)

Mr. MERRILL. The question of adequate return upon the investment is one of the elements that will determine the price at which capital can be secured, but under present conditions it is determined entirely by the State commissions and is hardly pertinent to discuss here.

Another requirement for securing cheap capital is that there shall be certainty and reasonableness of the conditions under which the lease may be granted. There are certain conditions which are fixed in the terms of the lease itself, such as the duration of term, renewal, etc., and those should be fixed and definite from the start. The conditions that can not be made definite in the terms of the lease are

the rate of return and the character and extent of service, because those are matters that, at least under present conditions, are regulating by State commissions and may vary from year to year at the pleasure of the commissions. It is nothing, anyway, that can be determined in the Federal laws.

The other condition is elimination of unnecessary restrictions.

Considerable has been said before this committee about the 50 per cent provision, that the permittee may not sell more than 50 per cent to distributing companies.

I am frank to say that such provision is scarcely necessary at the present time; certainly in no distant future those matters will be handled entirely, and should be handled entirely by the State commissions.

Now, there are two elements that make up costs; that is, the cost of a service or the cost of power. One element is the rate of return; the other element is the capital cost of the property.

It makes considerable difference in the State of Nevada, for instance, where I understand they have been allowing about a 10 per cent rate of return whether the capital on which that rate of return as calculated is investment or is investment plus appreciation of land and water rights, which in a particular case were 23 per cent of the total valuation.

Senator SMOOT. Do you not think that the commission, in allowing that rate, took into consideration the hazards of the market and the risk they were running in transmitting that power into Nevada?

Mr. MERRILL. That may have been so.

Senator SMOOT. Is it not generally understood that that was the case?

Mr. MERRILL. I do not so understand it.

Senator SMOOT. I so understand it, and I also understand that the market conditions are such that it is very doubtful whether they can even pay the interest on their bonded indebtedness and depreciation of the plant out of the rate that was allowed by the utilities commission.

Mr. MERRILL. Evidence was brought before the commission at the hearing that the concern had earned in the seven years prior to the date of the hearing an amount equal to its capital investment.

Senator SMOOT. I do not know but that may be true while the line was in the height of its prosperity, but I do know that the power is laying there now, and while I do not know what the percentage is, there is a very small percentage of it being used.

Mr. MERRILL. That may be perfectly true. I am familiar enough with the conditions to know that it has been a hazardous market—an extremely hazardous market.

Senator NORRIS. The hazard in that case has all passed away, if they have in seven years made enough to pay their entire cost.

Senator SMOOT. But there is not much left.

Mr. MERRILL. I do not know.

Senator SMOOT. It may last them seven years or one year or three months—nobody knows.

Senator NORRIS. However long it lasted, if they have got their money back there is not much hazard.

Senator CLARK. They are starting over again.

Mr. MERRILL. The reduction of the capital cost, because the reduction in the capital cost means reduction in rates, is something in which the public is vitally concerned. If we start with the assumption first that the interests of the investor shall be protected to the extent of his full investment, then from the public standpoint, we should say that the capital cost, on which the rates are figured, shall be limited to that investment, and that there shall not enter into it such elements as unearned increment in the lands and water rights and those intangible elements, such as franchise value and going value.

In order that the capital charge may be kept as low as possible it is necessary that power sites should be retained in public ownership, because once they pass to private ownership no commission, so far as I am aware, can be sure of the ability to value them on their cost and not on their appreciated value. It seems to me that the retention of power sites in public ownership and the ability to prevent their capitalization and, in addition, the provision, in granting leases of this character, to cut out the unearned increment in the private lands immediately concerned in the development, is the largest function of the Federal Government in this water-power situation.

A good deal has been said here about the several functions of the State and Federal Governments in the matter of rate regulation. I can not agree either with some of those who are favorable to the bill or some of those who have been opposed to it. In my opinion the question of rate regulation is primarily a matter of State sovereignty, State authority, not because I am personally concerned whether the one or the other does it, as a matter of abstract right, but because I believe State regulation may be more effective. The State commissions are on the ground; they have the machinery to get the information; and so far as State commissions are in existence my opinion is that they should have complete control over the question of rates and of service and of capital indebtedness.

Senator NORRIS. On that point I would like to inquire about this Nevada corporation that so much has been said about in these hearings, or that decision which has been referred to by some of the witnesses.

Mr. MERRILL. Just let me show you on the map.

It is this one in here [indicating on map]; the Nevada-California corporation, with its generating plants all up here in California in the Inyo National Forest. They also have a steam plant in San Bernardino. It built this long transmission line to San Bernardino in order to dispose of the power down in here [indicating]; and recently they have proposed to extend this line from San Bernardino clear down to the Mexican border.

The rates that the Nevada commission allowed were in these towns in Nevada.

Senator NORRIS. What did they allow?

Mr. MERRILL. They allowed a certain amount of return on the entire value of the property which would be served in Nevada.

Senator SMOOT. Generated in California and consumed in Nevada.

Mr. MERRILL. I am not sure about the proportions.

Senator NORRIS. In which State is the generating system?

Mr. MERRILL. This [indicating] is the generating system in California. The lines cross into Nevada, and they were distributing in Nevada.

Senator NORRIS. What per cent did they allow them?

Senator SMOOT. Ten per cent without the increase in value of land and franchise.

Mr. MERRILL. Was it not 10 per cent with the interest and 7 per cent without it?

Senator SMOOT. No; 10 per cent without.

Senator NORRIS. And where does the 17 per cent come in?

Mr. MERRILL. My recollection is just a little different from Senator Smoot's.

Senator SMOOT. It is so long since I have read it that I could not say positively whether that is true or not, but as I remember it, that is true.

Mr. MERRILL. But this is what was done: The Nevada commission fixed the rates in Nevada for a corporation supplying power in Nevada generated in California and transmitted over into Nevada, which is the same way the State commission in California fixed all the rates down here [indicating].

Senator SMOOT. Of course, while that power was generated in California, there was none of it used in California; it went out of the generating plant right over into Nevada before it struck any users of the power.

Mr. MERRILL. I do not think that is quite right.

Senator SMOOT. I mean the original plant.

Mr. MERRILL. I think it supplied power down here in Owens Valley.

Senator SMOOT. I was over there when they were building their plant. I have not been there for some time, but I was over there when they were building this plant, and my understanding is that they were not selling any current whatever until they reached Nevada.

Mr. MERRILL. The rates of return allowed by the commission are 9 per cent on the generating plant and transmission lines, 8 per cent on the working capital, and 11 per cent on all other properties.

Senator NORRIS. At that time had this long line in California been constructed?

Mr. MERRILL. Certainly.

Senator NORRIS. What had they paid the seven years preceding in which they got a return of their entire capital investment?

Mr. MERRILL. That was the entire capital investment in Nevada. They charged about 20 cents per kilowatt-hour.

Now, we have up here in northern California another concern slightly different in that it has a generating plant on each side of the line, a generating plant in Oregon, and generating plants in California, and they are interconnected. The situation is this, as I look at it, and it is the situation in effect at the present time: That the California commission, in a case like the one we have been discussing, will fix the rates within the State of California, and the Nevada commission will fix them in the State of Nevada. Up here in the northern part of the State the Oregon commission will fix the rates

in Oregon and the California commission will fix the rates in the State of California. And I must confess that I can not see any difficulty that will arise out of that practice, even though that is a case that I presume would be called interstate transmission of electricity.

Senator NORRIS. That would be changed if this bill were passed, would it not?

Mr. MERRILL. Yes; if this bill were passed in its present form those rates in Nevada and California would be subject to the jurisdiction of the Secretary of the Interior instead of the State commission of California.

Senator SMOOT. Do you not believe they would be subject now to the Interstate Commerce Commission if there is complaint made?

Mr. MERRILL. I am not clear on that, Senator. I am a little doubtful whether that is interstate commerce to that extent, but if it is interstate commerce, there is no question, of course, upon the proper authorization of Congress that the Interstate Commerce Commission can handle it. My only point is that I do not think it is necessary that it should be handled that way, and I think it can be better and more satisfactorily handled for the people of the communities themselves; that there will be a better understanding and a clearer justice if it is handled by commissions on the ground selected for the purpose and familiar with the conditions.

Senator CLARK. If it is interstate commerce, do you think the Secretary of the Interior ought to handle it?

Mr. MERRILL. I do not think it ought to be handled by any administrative officer, unless chosen for the specific purpose.

Senator CLARK. That is the question I wanted to ask.

Senator NORRIS. Now, in this particular case, in Nevada and in California which you have been talking about, what are the rates in Nevada as compared with the rates in California? How, as a matter of fact, have those two commissions fixed the rates?

Mr. MERRILL. I can not give you that offhand. I could give you the information.

Senator NORRIS. They are different, are they not?

Mr. MERRILL. I presume they are.

Senator NORRIS. Would not a difficulty arise if the Nevada commission allowed them to have a larger rate on their return than the California commission, and they could transfer their energy as they pleased—that the tendency of the company would be to get as much of it in Nevada and as little in California as possible?

Mr. MERRILL. No; because that concern there would be required to extend its service into California if that service was necessary.

Senator NORRIS. Suppose the two fields, in Nevada and California, demanded more power than the company could supply—the demand for power was too large for the output of the plant—and there was a limitation in that respect?

Mr. MERRILL. Well, there is this consideration: This company must do enough business down in here (San Bernardino) to pay for their investment or else throw it away. Assume that there is only enough in here [indicating], that the only development they can possibly make is insufficient to supply all the power demanded, and, that

they desire to sell it all to Nevada because they were allowed to get more there, the California commission could compel them to maintain their service in California.

Senator NORRIS. I should think there might be a tendency on the part of the two commissions, in a case of that kind, if there were undeveloped possibilities to be reached by this plant, to allow large rates in order to have the company develop that particular State rather than to use the energy in the other State.

Mr. MERRILL. But the State commission in California will not allow that concern to abandon its plant and withdraw its service.

There are only two more points that I might touch upon, and one of those is in relation to rental charges. But I need not discuss it before the committee, for I took up this matter quite fully before the Public Lands Committee of the House, and my discussion in regard to it can be found, if anyone is interested, by turning to page 450 of the House hearings, so it will not be necessary to repeat it.

Just in closing, to answer again a question that was just presented. I think that if the Federal Government has to assume such powers as are provided in this bill, or approximately those powers, that administration can not be effective except by a commission appointed by the Federal Government, not even such a commission as has been proposed in one bill already introduced before the Senate, namely, a commission of three secretaries, because it is absolutely and physically impossible for the secretaries themselves to handle such matters. These are matters of technical engineering and financial and economic details which can not be satisfactorily handled, as we have had evidence times without number, except by technical commissions. We are all of us familiar with the results that have come from attempted control of rates and service by boards of aldermen in our cities or by city councils. It has been a fiasco from start to finish. We never had any effective regulation that protected both the public and the investor until we got our technically trained public utilities commissions, with length of service and sufficient compensation to get the right class of men.

Senator STERLING. In a case of transmission of power from one State to another, instead of leaving the regulation and control under the Secretary of the Interior, why not give the regulation, so to speak, to the supervision of the Interstate Commerce Commission?

Mr. MERRILL. You mean in a case like that?

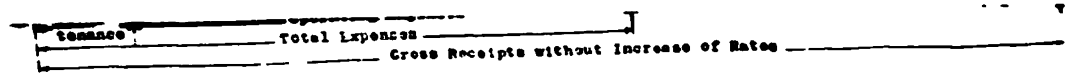
Senator STERLING. Yes.

Mr. MERRILL. Well, sir, I do not believe that is necessary. That is, where there are those organized commissions handling this matter under their State law, I think that they can each one handle it as one of the State functions with perfect satisfaction, without the necessity of someone coming in and taking them all.

Senator STERLING. That would not mean that the Interstate Commerce Commission would interfere in each case, but only upon complaint made that then the Interstate Commerce Commission shall have supervision.

Mr. MERRILL. That would be all right.

That is all I care to say, except that I wish to add just this. Some questions have been asked before the committee, and I have here, if


tenance
Total Expenses
Gross Receipts without Increase of Rates

anybody cares to have the information, a condensed financial statement of the California hydroelectric systems, showing the capitalization, bonded debt, and revenues, and also a tabulation showing the conditions imposed on modern mortgages for hydroelectric bonds in the State of California.

Senator NORRIS. I would like to have them in the record, Mr. Chairman. I think they would be very valuable.

The CHAIRMAN. They may be put in the record.

Mr. MERRILL. They would have to come in as insert sheets in the record.

The CHAIRMAN. Very well, let them go in the record.

(The exhibits referred to by Mr. Merrill are as follows:)

B.

TABLE 7.—*Condensed financial data California hydroelectric systems, 1913.*

Market.	Name of company.	Capitalization.				Bonded debt.		
		Preferred stock.		Capital or common stock.		Current mortgage.	Underlying issues.	Total bonded debt.
		Authorized.	Outstanding.	Authorized.	Outstanding.			
1	2	3	4	5	6	7	8	9
Northern California	California-Oregon Power Co			$10,000,000	$10,000,000	$3,518,000	$1,200,000	$4,718,000
Grand total for market				10,000,000	10,000,000	3,518,000	1,200,000	4,718,000
Central California	Pacific Gas & Electric Co	$10,000,000	$10,000,000	150,000,000	63,806,166	24,986,000	50,499,800	75,485,800
	Northern California Power Co Con			10,000,000	10,000,000	3,964,000	3,203,200	7,167,200
	Sierra & San Francisco Power Co			20,000,000	20,000,000	6,500,000	8,704,023	15,204,023
	Great Western Gas & Electric Co	2,000,000	2,000,000	3,000,000	3,000,000	900,000	[1] 1,000	901,000
	Great Western Power Co			27,500,000	27,500,000	21,440,000	3,151,000	24,591,000
	Western States Gas & Electric Co	10,000,000	2,125,000	5,000,000	3,231,500	4,299,000	419,000	4,718,000
	Oro Electric Corporation	3,500,000	3,500,000	6,500,000	6,500,000	1,830,000	333,000	2,163,000
	Sierra Mt. Water & Power Co			4,300,000	4,300,000	1,250,000		1,250,000
	Coast Counties Gas & Electric Co	2,000,000	1,000,000	2,000,000	1,000,000	92,000	[2] 1,447,000	1,539,000
	Yosemite Power Co	2,000,000	410,000	8,000,000	1,640,300	1,708,000		1,708,000
	Tuolumne Electric Co			250,000	145,865	28,000	60,000	88,000
	California Telephone & Light Co	4,000,000	308,050	6,000,000	766,000	350,000		350,000
Grand total for market		33,500,000	19,343,050	242,550,000	141,889,831	67,347,000	67,818,023	135,165,023
South Central California	San Joaquin Lt. & Power Co	10,000,000	6,500,000	15,000,000	11,000,000	5,470,000	4,539,000	10,009,000
	Mutual Gas Co. Pacific Service Corp	500	500	1,000,000	1,000,000	455,000	358,000	813,000
	Mt. Whitney Power & Electric Co	1,900,000	750,000	3,200,000	1,875,000	1,165,000		2,165,000
Grand total for market		11,900,500	7,250,500	19,200,000	13,875,000	8,090,000	4,897,000	12,987,000

Southern California	Pacific Light & Power Corp. (first)	5,000,000	3,057,000					
	Pacific Light & Power Corp. (second)	10,000,000	9,975,000	25,000,000	10,559,500	10,000,000	10,650,000	20,650,000
	Southern California Edison Co	4,000,000	4,000,000	20,000,000	10,400,000	10,725,000	3,756,000	14,481,000
	Ontario Power Co			500,000	380,000	321,000		321,000
	Holton Power Co			1,500,000	1,250,000	300,000	500,000	800,000
	Ventura County Power Co	1,000,000	1,000,000	1,500,000	1,500,000	943,000		943,000
Grand total for market		20,000,000	18,032,000	54,500,000	24,089,500	22,289,000	14,912,000	37,201,000
Nevada	Nevada-California Power Co			5,000,000	5,000,000	2,696,000		2,696,000
	Southern Sierras Power Co			5,000,000	5,000,000	2,500,000		2,500,000
	Pacific Power Co			1,000,000	800,033	800,000		800,000
	Truckee River General Electric Co			3,000,000	3,000,000			
Grand total for market				14,000,000	13,800,033	5,996,000		5,996,000
Grand total for State		65,300,500	44,625,550	340,250,000	203,654,304	107,240,000	88,827,023	196,067,023

[1] This does not include $279,000 in outstanding bonds of Monterey & Pacific Grove Railroad, which is controlled through stock ownership.
[2] Including City Electric Co. and California Electric Generating Co.
[3] This does not include $631,000 in bonds of Union Traction Co., which is controlled by ownership of its entire capital stock.

B.

TABLE 7.—*Condensed financial data California hydroelectric systems, 1913*—Continued.

Market.	Name of company.	Gross corporate revenues.				Total assets.
		Electric revenues.	Gas revenues.	Water, railway, and miscellaneous revenues.	Gross revenues from all sources.	
1	2	10	11	12	13	14
Northern California	California-Oregon Power Co	$308,784.25		$38,477.45	$347,261.70	$16,010,358.63
Grand total for market		308,784.25		38,477.45	347,261.70	16,010,358.63
Central California	Pacific Gas & Electric Co	8,362,540.51	$6,547,594.96	713,882.06	15,624,017.53	182,260,761.96
	Northern California Power Co. Con	760,346.34	28,952.80	49,282.27	838,581.41	18,177,695.36
	Sierra & San Francisco Power Co	1,031,620.38		57,154.12	1,088,774.50	35,961,166.26
	Coast Valleys Gas & Electric Co	157,262.79	42,104.19	28,528.50	227,895.48	6,062,986.73
	Great Western Power Co	1,845,702.58		258,956.06	2,104,658.64	52,358,193.18
	Western States Gas & Electric Co	880,652.77	204,994.45		1,085,647.22	11,095,465.02
	Oro Electric Corporation	196,918.43		13,904.21	210,822.64	23,677,273.46
	Snow Mt. Water & Power Co	124,576.27		271.32	124,847.59	6,492,246.42
	Coast Counties Gas & Electric Co	269,962.28	90,797.43	5,465.59	365,925.30	5,816,914.09
	Yosemite Power Co	65,554.25		175.89	65,730.14	3,929,021.35
	Tuolumne Electric Co	2,414.04			2,414.04	321,404.02
	California Telephone & Light Co	46,573.89		680.32	19,449.76	1,499,137.97
Grand total for market		13,743,924.53	6,914,443.83	1,128,300.34	21,758,764.25	347,652,245.82
South Central California	San Joaquin L. & Power Co	1,461,398.22	176,145.39	28,475.10	1,666,018.71	29,614,325.09
	Midland Counties Public Service Corp	170,103.65	23,849.30	14,850.70	208,803.65	2,326,474.24
	Mt. Whitney Power & Electric Co	567,072.31		30,862.40	597,934.71	6,047,323.77
Grand total for market		2,198,574.18	199,994.69	74,188.20	2,472,757.07	37,988,123.10
Southern California	Pacific Light & Power Corp. (second)	2,634,990.85		226,745.22	2,861,736.07	58,265,010.63
	Southern California Edison Co	4,473,033.15	256,239.99	62,432.96	4,791,716.10	35,251,564.72
	Ontario Power Co	110,169.95		14,287.54	124,457.49	1,053,734.39
	Holton Power Co	139,787.22		22,409.90	161,197.12	2,216,265.68
	Ventura County Power Co	130,754.87	53,116.89	30,695.27	231,567.03	3,703,634.28
Grand total for market		7,486,736.04	309,346.88	375,580.89	8,170,672.81	100,490,209.68

Nevada	Nevada California Power Co.	995,003.83		76,959.49	1,072,023.32	10,812,156.18
	Southern Sierras Power Co.	285,349.82		82,780.06	368,169.88	9,655,676.77
	Pacific Power Co.	73,040.15			73,040.15	2,035,624.69
	Truckee River General Electric Co.	327,409.52		5,376.96	332,786.48	10,818,590.46
Grand total for market		1,680,903.32		165,116.51	1,846,019.83	33,022,048.07
Grand total for State		25,418,822.32	7,422,785.40	1,781,673.39	34,595,476.66	535,162,985.30

C.

Table illustrating probable result of applying a scheme of amortization to the properties of the Pacific Gas & Electric Co., California.

Year.	Capital account.	Gross receipts.	Maintenance.	Operation expenses.	Total expenses.	Net revenues.	Interest and depreciation
1910	$106,000,000	$13,360,000	$1,195,000	$6,440,000	$7,635,000	$5,725,000	$3,654,000
1911	110,000,000	13,860,000	1,240,000	6,670,000	7,910,000	5,950,000	3,786,000
1912	114,000,000	14,360,000	1,285,000	6,900,000	8,185,000	6,175,000	3,921,000
1913	118,000,000	14,860,000	1,330,000	7,130,000	8,460,000	6,400,000	4,058,000
1914	122,000,000	15,360,000	1,375,000	7,360,000	8,735,000	6,625,000	4,198,000
1915	126,000,000	15,860,000	1,420,000	7,590,000	9,010,000	6,850,000	4,339,000
1916	130,000,000	16,360,000	1,465,000	7,820,000	9,285,000	7,075,000	4,484,000
1917	134,000,000	16,860,000	1,510,000	8,050,000	9,560,000	7,300,000	4,631,000
1918	138,000,000	17,360,000	1,555,000	8,280,000	9,835,000	7,525,000	4,781,000
1919	142,000,000	17,860,000	1,600,000	8,510,000	10,110,000	7,750,000	4,934,000
1920	146,000,000	18,360,000	1,645,000	8,740,000	10,385,000	7,975,000	5,089,000
1921	150,000,000	18,860,000	1,690,000	8,970,000	10,660,000	8,200,000	5,251,000
1922	154,000,000	19,360,000	1,735,000	9,200,000	10,935,000	8,425,000	5,417,000
1923	158,000,000	19,860,000	1,780,000	9,430,000	11,210,000	8,650,000	5,586,000
1924	162,000,000	20,360,000	1,825,000	9,660,000	11,485,000	8,875,000	5,759,000
1925	166,000,000	20,860,000	1,870,000	9,890,000	11,760,000	9,100,000	5,935,000
1926	170,000,000	21,360,000	1,915,000	10,120,000	12,035,000	9,325,000	6,115,000
1927	174,000,000	21,860,000	1,960,000	10,350,000	12,310,000	9,550,000	6,298,000
1928	178,000,000	22,360,000	2,005,000	10,580,000	12,585,000	9,775,000	6,485,000
1929	182,000,000	22,860,000	2,050,000	10,810,000	12,860,000	10,000,000	6,675,000
1930	186,000,000	23,360,000	2,095,000	11,040,000	13,135,000	10,225,000	6,869,000
1931	190,000,000	23,860,000	2,140,000	11,270,000	13,410,000	10,450,000	7,067,000
1932	194,000,000	24,360,000	2,185,000	11,500,000	13,685,000	10,675,000	7,269,000
1933	198,000,000	24,860,000	2,230,000	11,730,000	13,960,000	10,900,000	7,475,000
1934	202,000,000	25,360,000	2,275,000	11,960,000	14,235,000	11,125,000	7,685,000
1935	206,000,000	25,860,000	2,320,000	12,190,000	14,510,000	11,350,000	7,900,000
1936	210,000,000	26,360,000	2,365,000	12,420,000	14,785,000	11,575,000	8,121,000
1937	214,000,000	26,860,000	2,410,000	12,650,000	15,060,000	11,800,000	8,346,000
1938	218,000,000	27,360,000	2,455,000	12,880,000	15,335,000	12,025,000	8,576,000
1939	222,000,000	27,860,000	2,500,000	13,110,000	15,610,000	12,250,000	8,811,000
1940	226,000,000	28,360,000	2,545,000	13,340,000	15,885,000	12,475,000	9,050,000
1941	230,000,000	28,860,000	2,590,000	13,570,000	16,160,000	12,700,000	9,294,000
1942	234,000,000	29,360,000	2,635,000	13,800,000	16,435,000	12,925,000	9,542,000
1943	238,000,000	29,860,000	2,680,000	14,030,000	16,710,000	13,150,000	9,795,000
1944	242,000,000	30,360,000	2,725,000	14,260,000	16,985,000	13,375,000	10,053,000
1945	246,000,000	30,860,000	2,770,000	14,490,000	17,260,000	13,600,000	10,316,000
1946	250,000,000	31,360,000	2,815,000	14,720,000	17,535,000	13,825,000	10,584,000
1947	254,000,000	31,860,000	2,860,000	14,950,000	17,810,000	14,050,000	10,857,000
1948	258,000,000	32,360,000	2,905,000	15,180,000	18,085,000	14,275,000	11,136,000
1949	262,000,000	32,860,000	2,950,000	15,410,000	18,360,000	14,500,000	11,421,000
1950	266,000,000	33,360,000	2,995,000	15,640,000	18,635,000	14,725,000	11,712,000
Total							

Period of amortization.—Assumed to be applied to properties held under a lease terminating in 50 years from date of issuance, and that 10 years are required to develop business to a point where amortization funds can be set up. Actual period of amortization, 40 years.

Capital account.—Taken as $100,000,000 on Jan. 1, 1910. Assumed that a normal increase would be $4,000,000 annually. In the past history of the company average annual additions have been considerably greater. Assumed that annual increase will be made, one-half by issuance of bonds, one-half out of surplus or by stock subscription.

Bonded indebtedness.—Bonded indebtedness of company at above date, approximately $57,000,000. Average date of expiration, 1930. Average interest, 5.06 per cent. Assumed that bonds not retired at date of expiration will be refunded for retirement on or before 1950. Assumed that one-half annual additions to capital provided for by issuance of bonds at 5 per cent due in 1950.

Gross receipts.—Company's gross receipts available for 1910 taken as $13,360,000. Assumed that gross receipts will increase $500,000 annually, which is average increase that company has maintained in the past.

Maintenance.—Average maintenance expenses as appearing from company's records, 9 per cent of gross receipts. Assumed that this percentage will be maintained in the future.

Operating expenses.—Average percentage according to records, 46 per cent of gross receipts. Same percentage assumed for future.

Retirement of bonded indebtedness.—Assumed that both existing and future bond issues will be retired by equal annual payments, such payments to include interest at 5 per cent upon all bonds of series outstanding.

Amortization of property not covered by bonds.—Remainder of property consisting of $49,000,000, original capital value, plus annual additions of $2,000,000, to be amortized by annual sinking-fund payments sufficient at 5 per cent compound interest to accumulate by 1950 to the amount of capital account not covered by bonded indebtedness.

Dividends.—Assumed that company should be entitled to annual dividend of 2 per cent capital account. Last column shows, on assumption that 2 per cent dividends should be allowed, the amount of stockholders' unpaid equity with interest at 5 per cent which would accumulate under the amortization scheme if gross receipts advanced as shown in the table; that is, if there were no increase in rates to consumers.

Table illustrating probable result of applying a scheme of amortization to the properties of the Pacific Gas & Electric Co., California—Continued.

Year.	Balance for dividends.	Actual per cent for dividends.	2 per cent of capital.	Deficiency in revenue, 2 per cent dividend basis.	Gross receipt for 2 per cent dividends.	Increase in rates per cent.	Stockholders' annual equity.
1910	$2,071,000	1.95	$2,120,000	$49,000	$13,409,000	0.37	$345,000
1911	2,164,000	1.97	2,200,000	36,000	13,896,000	.26	241,000
1912	2,254,000	1.98	2,280,000	26,000	14,386,000	.18	166,000
1913	2,342,000	1.98	2,360,000	18,000	14,878,000	.12	109,000
1914	2,427,000	1.99	2,440,000	13,000	15,373,000	.08	75,000
1915	2,511,000	1.99	2,520,000	9,000	15,869,000	.06	50,000
1916	2,591,000	1.99	2,620,000	9,000	16,369,000	.06	47,000
1917	2,669,000	1.99	2,680,000	11,000	16,871,000	.07	55,000
1918	2,744,000	1.99	2,760,000	12,000	17,372,000	.07	57,000
1919	2,816,000	1.98	2,840,000	24,000	17,884,000	.13	109,000
1920	2,885,000	1.98	2,920,000	35,000	18,395,000	.19	151,000
1921	2,949,000	1.97	3,000,000	51,000	18,951,000	.27	210,000
1922	3,010,000	1.96	3,080,000	70,000	19,430,000	.36	274,000
1923	3,067,000	1.94	3,160,000	93,000	19,953,000	.47	347,000
1924	3,119,000	1.92	3,240,000	121,000	20,481,000	.59	430,000
1925	3,165,000	1.90	3,320,000	155,000	21,015,000	.74	525,000
1926	3,207,000	1.89	3,400,000	193,000	21,553,000	.90	622,000
1927	3,242,000	1.86	3,480,000	238,000	22,098,000	1.09	731,000
1928	3,270,000	1.84	3,560,000	290,000	22,650,000	1.30	848,000
1929	3,292,000	1.81	3,640,000	348,000	23,208,000	1.53	970,000
1930	3,305,000	1.78	3,720,000	415,000	23,775,000	1.77	1,101,000
1931	3,308,000	1.74	3,800,000	492,000	24,352,000	2.06	1,243,000
1932	3,303,000	1.70	3,880,000	577,000	24,937,000	2.37	1,389,000
1933	3,285,000	1.66	3,960,000	675,000	25,535,000	2.72	1,547,000
1934	3,255,000	1.61	4,040,000	785,000	26,145,000	3.10	1,713,000
1935	3,212,000	1.56	4,120,000	908,000	26,768,000	3.51	1,888,000
1936	3,151,000	1.50	4,200,000	1,049,000	27,409,000	3.98	2,077,000
1937	3,072,000	1.44	4,280,000	1,208,000	28,068,000	4.50	2,278,000
1938	2,971,000	1.37	4,360,000	1,389,000	28,749,000	5.08	2,495,000
1939	2,845,000	1.28	4,440,000	1,595,000	29,455,000	5.72	2,727,000
1940	2,689,000	1.19	4,520,000	1,831,000	30,191,000	6.46	2,983,000
1941	2,496,000	1.09	4,700,000	2,204,000	31,064,000	7.64	3,418,000
1942	2,258,000	.96	4,680,000	2,422,000	31,782,000	8.26	3,577,000
1943	1,964,000	.82	4,760,000	2,796,000	32,656,000	9.37	3,934,000
1944	1,598,000	.66	4,840,000	3,242,000	33,602,000	10.70	4,344,000
1945	1,135,000	.46	4,920,000	3,785,000	34,645,000	12.30	4,830,000
1946	537,000	.21	5,000,000	4,463,000	35,823,000	14.25	5,427,000
1947	— 267,000	— .11	5,080,000	5,347,000	37,207,000	16.80	6,192,000
1948	—1,411,000	— .54	5,160,000	6,571,000	38,931,000	20.30	7,241,000
1949	—3,237,000	—1.24	5,240,000	8,477,000	41,337,000	25.75	8,901,000
1950	—7,112,000	—2.67	5,320,000	12,432,000	45,792,000	37.20	12,432,000
Total				64,464,000			88,099,000

The forms submitted by Mr. Merrill are as follows:

Form 61.
(Revised Dec. 20, 1913.)

UNITED STATES DEPARTMENT OF AGRICULTURE.

FOREST SERVICE.

---------- water power.
(Name of Forest.)

(Name of applicant.)

---------- ----------
(Use applied for.) (Date of priority of application.)

POWER STIPULATION.

The ——— company, having on the —— day of ———, 19—, filed with the district forester at ——— an application, in accordance with the regulations of the Secretary of Agriculture, for a permit to occupy and use certain lands of the United States within the ——— National Forest in the State of ——— and more particularly described in and shown by the maps and plans accompanying said application and made a part thereof, upon which to construct, maintain, and operate certain project works described in said application for the purpose of storing, conducting, and, or, using water for developing power, and for the purpose of transmitting said power, does hereby, in consideration of and as a prerequisite to the approval of the said application and the granting of the permit applied for, stipulate and agree as follows, to wit:

DEFINITION OF TERMS.

ARTICLE 1. That the following terms wherever used in this stipulation shall have the meanings hereby in this article assigned to them, viz:

"Permittee" means the ——— company, a corporation organized and existing under and by virtue of the laws of the State of ———, and having its office and principal place of business at ——— in the State of ———.

"Secretary" means the Secretary of Agriculture of the United States of America, or his successor, or his duly authorized representative, or such other officer or agent of the United States as may be legally designated.

"National Forest lands" means public lands of the United States reserved under the terms of the act of March 3, 1891 (26 Stat., 1095), as amended by the act of June 4, 1897 (30 Stat., 11).

"Permit," as used in this stipulation, means the final power permit applied for by the permittee upon the —— day of ———, 19—, in accordance with the regulations of the Secretary under the act of February 15, 1901 (31 Stat., 790), and in consideration of which this stipulation is filed with the district forester.

"Municipal purposes" means and includes all purposes within municipal powers as defined by the charter of the municipal corporation, where any such purpose is directly pursued by the municipal corporation itself with the primary object of promoting the security, health, good government, or general convenience of its inhabitants.

"Power business" means the entire business of the permittee in the generation, distribution, and delivery of power by means of any one power system together with all works and tangible property involved therein, including freeholds and leaseholds in real property.

"Power system" means all interconnected plants and works for the generation, distribution, and delivery of power.

"Power project" means a complete unit of power development, consisting of a power house, conduit or conduits conducting water thereto, all storage or diverting or forebay reservoirs used in connection therewith, the transmission line delivering power therefrom, any other miscellaneous structures used in connection with said unit or any part thereof, and all lands the occupancy and use of which are necessary or appropriate in the development of power in said unit.

"Project works" means the physical structures of a power project.

"Construction of the project works" means the actual construction of dams, water conduits, power houses, transmission lines, or some permanent structure necessary to the operation of the complete power project, and does not include surveys or the building of roads and trails, or the clearing of reservoir sites or other lands to be occupied, or the performance of any work preliminary to the actual construction of the permanent project works.

"Operation period" means the period covered by final permit subsequent to the actual beginning of operation.

"Survey-construction period" means the period covered by preliminary and final permits prior to the operation period.

"Nominal stream flow" means the sum of (*a*) the flow determined by averaging the values estimated for the natural mean flow for the two-month (calendar) minimum flow period in each successive five-year period or major fraction thereof and (*b*) the stream flow made available from storage not by the project works.

"Load factor" means the ratio of average power output to maximum power output.

"Total capacity of the power site" means the continued product of (1) the factor 0.08;[1] (2) the average effective head, in feet; (3) the stream flow estimated to be available at the intake (in second-feet and in amount not to exceed the maximum hydraulic capacity of the project works) considered as the sum of (*a*) the nominal stream flow and (*b*) stream flow made available from storage by project works; and (4) a factor, not less than the average load factor of the power system, representing the degree of practicable utilization of the stream flow estimated to be available, and based on the extent of practicable forebay storage and the load factor of the power system.

"Rental capacity of the power site" means the capacity on which the rental charges are based. Unless otherwise ordered by the Secretary, it will be determined by making the following deductions from the total capacity of the power site:

(*a*) Whenever power projects include conduit sites not wholly on national forest lands, a deduction will be made from that part of the total capacity of the power site which is due to the use of the nominal stream flow. This deduction will be, in per cent, the sum of (1) the product of the proportion of the average effective head obtained from the dam by the per cent of submerged lands below the flow line fixed by the average effective head that are not national forest lands, and (2) the product of the proportion of the average effective head obtained from the water conduit (from intake to tailrace outlet) by the per cent of the length of said conduit which is not located on national forest lands.

(*b*) Whenever power projects include reservoir sites not wholly on national forest lands, a deduction will be made from that part of the total capacity of the power site which is due to the use of stream flow made available from storage by the project works. This deduction will be the per cent of the total area of the reservoir sites that is not national forest land.

(*c*) From the total capacity of the power site which remains after deductions (*a*) and (*b*) have been made will be made a further deduction, which, in per cent, will be the product of the square of the distance of primary transmission in miles, and the factor 0.001; but in no case will deduction (*c*) exceed 25 per cent.

AMENDMENT OF MAPS AND PLANS.

ART. 2. To construct its works on the locations shown upon the maps and in accordance with the plans specifically described in its final application for permit, filed with the District Forester at ——— on the —— day of ———, 19—, which said maps and plans are hereby made a part of this stipulation, and to take no material deviation from said locations or from said plans unless and until maps or plans showing such deviation shall have been filed with the District Forester and approved by the Secretary; and no deviation or amendment will be allowed which will interfere with the occupancy and use of national forest lands under existing permits, or conflict with prior rights under pending applications.

ART. 3. To file, within six (6) months after the completion of each part of the project works, as required in article 5 hereof, in the manner prescribed for original maps of location, maps showing the final location of each part of the project works as constructed, if such final location varies from that shown upon maps originally filed or upon approved amendments thereof; and to file also within six (6) months of the completion of each part of the project works as aforesaid, in such manner as may be prescribed by the Secretary, detailed working plans of each part of the project works as constructed, except of such parts as have been constructed in compliance with the plans originally filed or approved amendments thereof.

BEGINNING AND COMPLETION OF CONSTRUCTION AND BEGINNING OF OPERATION.

ART. 4.[1] To begin the construction of the aforesaid project works on or before——— and thereafter diligently and continuously to prosecute such construction, unless such construction is temporarily interrupted by climatic conditions or by some special or peculiar cause beyond the control of the permittee.

[1] The factor 0.08 represents the horsepower at 70 per cent efficiency of a second-foot of water falling through a head of 1 foot.

ART. 4.[1] To begin the construction of the following several parts of the aforesaid project works on or before the several dates in this article specified, and thereafter diligently and continuously to prosecute such construction, unless such construction is temporarily interrupted by climatic conditions or by some special or peculiar cause beyond the control of the permittee.

(1) On or before———, I Part I, consisting of———.

ART. 5.[1] To complete the construction and begin the operation of the aforesaid project works on or before———.

ART. 5.[1] To complete the construction and begin the operation of the following several parts of the aforesaid project works on or before the several dates in this article specified.

(1) On or before———, Part I, consisting of———.

ART. 6. That it is understood, if upon any one of the dates specified in Article 4 hereof, unless the time is extended by the written approval of the Secretary, after a showing by the permittee satisfactory to the Secretary that such beginning of construction of that part of the project works required to have been begun on the specified date has been prevented by the act of God, or by the public enemy, or by engineering difficulties that could not reasonably have been foreseen, or by other special and peculiar cause beyond the control of the permittee, that thereupon the permission to occupy and use National Forest lands for all parts of said project works, the construction of which has not been begun on said date shall terminate and become void; and that the permit, in so far as such parts of said project works are concerned, shall become of no effect.

ART. 7. That it is understood that the dates specified in Article 5 hereof for the completion of construction and the beginning of operation of the several parts of the project works will be extended only upon the written approval of the Secretary, after a showing by the permittee satisfactory to the Secretary that the completion of construction and beginning of operation has been prevented by the act of God, or by the public enemy, or by engineering difficulties that could not reasonably have been foreseen, or by other special and peculiar cause beyond the control of the permittee; and if such extension be not approved, that thereupon the permission to occupy and use National Forest lands for such parts of said project shall terminate and become void, and that the permit, in so far only as such parts of said project works are concerned, shall become of no effect.

ART. 8. That, except when prevented by the act of God, or by the public enemy, or by unavoidable accidents or contingencies, the permittee will, after the beginning of operation, continuously operate for the development of power the project works constructed, maintained, and, or, operated, in whole or in part, under the permit, unless upon a full and satisfactory showing of the reasons therefor this requirement shall be temporarily waived by the written consent of the Secretary.

CAPACITIES OF POWER SITE.

ART. 9. That the total capacity of the power site, permission of the occupancy and use of which, in whole or in part, has been applied for, shall, for the purposes of this stipulation, be deemed and taken to be ——horsepower, distributed as follows:——— and that the part of the aforesaid total capacity which is due to the use of the nominal stream flow shall, for the purposes of this stipulation, be deemed and taken to be—— ——horsepower, distributed as follows:———and that the part of the aforesaid total capacity which is due to the use of stream flow made available from storge by the project works shll, for the purposes of this stipulation, be deemed and taken to be———horsepower, distributed as follows:———*it being understood* that if any approved alterations or amendments of the maps of location or plans of project works, as provided for in Article 2 and Article 3 hereof, or any permanent change in the nominal stream flow, due to storage or otherwise, shall result in an increase or decrease in the total capacity of the power site, or of either part thereof, or of both, as said capacities are hereinbefore taken, said increased or decreased power capacities shall, from the beginning of the calendar year next succeeding the date of such approval, or of such change in nominal stream flow, be deemed and taken

[1] Use the first form of Articles 4 and 5 when but one complete power project is to be constructed and it is inadvisable to separate it into two or more units of construction. When several distinct power projects are involved, or where it may be desirable to divide a single power project into two or more units of construction, use the second form of Articles 4 and 5. Cancel form not used.

to be, for the purposes of this stipulation, the capacities of the power site occupied and used, in whole or in part, under the permit; and *it being further understood* that if at any time not less than ten (10) years after the original or after the last preceding determination of the said total capacity of the power site, or of either part thereof, or of both, either the permittee or the Secretary, on the ground of inaccuracy, insufficiency, or inapplicability of the data upon which said original or said last preceding determination of said capacities was made, shall apply for or give notice of review of said original or said last preceding determination, then and thereupon such review shall be taken by the Secretary and a redetermination of the capacities shall be made, and the said redetermined capacities shall, for the purposes of this stipulation, and from the beginning of the next calendar year, be deemed and taken to be the capacities of the power site occupied and used, in whole or in part, under the permit.

RENTAL CHARGES.

ART. 10. To pay annually in advance from the first day of January, 191—, to the ——— National Bank of ——— (United States depository), or such other Government depository or officer as may be hereafter legally designated, to be placed to the credit of the United States, a rental charge for the occupancy and use of the lands of the United States described and shown upon the maps hereinbefore referred to, which rental charge shall be calculated from the "rental capacity of the power site," as defined in article 1 hereof, at the following rates per horsepower per year:

For the unexpired portion of the calendar year and for the first full calendar year of the survey-construction period, and similarly for the operation period	$0.10
For the second full calendar year of each of said periods	.20
For the third year	.30
For the fourth year	.40
For the fifth year	.50
For the sixth year	.60
For the seventh year	.70
For the eighth year	.80
For the ninth year	.90
For the tenth and each succeeding year	1.00

it being understood that said estimated rental capacity may be adjusted annually by the Secretary to provide for changes in ownership of lands in reservoir sites and on water conduit lines and for changes in length of primary transmission; and *it being further understood* that at any time not less than ten (10) years after the issuance of the permit, or after the last revision of rates of rental charge thereunder, the Secretary may review such rental rates and impose such new rental rates as he may decide to be reasonable and proper: *Provided*, That such rental rates shall not be so increased as to reduce the margin of income (including appreciation in land values) from the power project or projects under the permit over proper actual and estimated expenses (including reasonable allowance for renwals and sinking-fund charges) to an amount which, in view of all the circumstances (including fair development expenses and working capital) and risks of the enterprise (including obsolescence, inadequacy, and supersession) is unreasonably small; but the burden of proving such unreasonableness shall rest upon the permittee.

ART. 11. That it is understood if the permittee completes the construction and begins the operation of each of the several parts of the aforesaid project works within the periods provided for in article 5 hereof, or any approved extension thereof, that then and thereupon all charges for the occupancy and use of national forest lands for said part of said project works so completed and operated which have been paid prior to the date of such completion and operation will be credited to the permittee and will be applied to the payment of charges due at the date of such completion and operation or to become due thereafter.

ART. 12. That it is understood if any part of the power developed by the project works under the permit is used by the permittee itself for irrigation as auxiliary to irrigation works owned and operated by the permittee, or for the temporary development of power to be used in the construction of permanent project works under permit to the permittee, that such a proportional part of

the full schedule charge for any calendar year will be credited to the permittee as the power developed by the project works and used for the purposes above named bears to the total output of the project works for said year; and that all amounts so credited will be applied to the cancellation of charges as they may thereafter become due.

ART. 13. That it is understood if any part of the aforesaid rental charge payable as hereinbefore provided shall, after due notice has been given, be in arrears for six (6) months, that then and thereupon the permit and the authority granted thereunder to occupy and use national forest lands shall terminate and be void.

ART. 14. That the decision of the Secretary shall be final as to all matters of fact upon which the calculation of the capacities or charges depends.

RECORDS AND ACCOUNTS.

ART. 15. Upon demand of the Secretary to install at such places and maintain in good operating condition in such manner as shall be approved by the Secretary, free of all expense to the United States, accurate meters, measuring weirs gauges, and, or, other devices approved by the Secretary and adequate for the determination of the amount of power developed by the project works and of the flow of the streams from which the water is to be diverted for the operation of said works, and of the amount of water used in the operation of said works, and of the amounts of water held in and drawn from storage; to keep accurate and sufficient records of the foregoing to the satisfaction of the Secretary; and to make a return during January of each year, under oath, of such of the records of measurements for the year ended on December 31, preceding, made by or in the possession of the permittee, as may be required by the Secretary.

ART. 16. That the books and records of the permittee in so far as they contain information concerning the power project or projects under the permit, or the power business conduction in connection therewith, shall be open at all times to the inspection and examination of the Secretary.

ART. 17. Upon demand of the Secretary to maintain in such form as the Secretary may prescribe or approve a system of accounting of the entire power business transacted in connection with the power project or projects under the permit, and to render annually such reports of said power business as the Secretary may direct: *Provided, however*, That if the laws of the State in which the said power business or any part thereof is transacted require periodical reports from public-utility corporations under a uniform system of accounting, copies of such reports so made will be accepted as fulfilling the requirements of this article.

MISCELLANEOUS REQUIREMENTS.

ART. 18. To protect all Government and other telephone, telegraph, and power transmission lines at crossing of and at all places of proximity to the permittee's transmission lines in a workmanlike manner according to the usual standards of safety for construction, operation, and maintenance in such cases; and to maintain the transmission lines in such manner as not to menace life or property.

ART. 19. To clear and keep clear all lands of the power project for such width and in such manner as the Secretary may direct.

ART. 20. To dispose of all brush, refuse, or unused timber on national forest lands resulting from the construction and maintenance of the project works as may be required by the Secretary.

ART. 21. To build and repair roads and trails as required by the Secretary, whenever any existing roads or trails are destroyed or injured by the construction work or flooding under the permit and to build and maintain necessary and suitable crossings, as required by the Secretary, for all roads and trails which intersect the water conduit, if any, constructed, maintained, and operated under the permit.

ART. 22. To do everything reasonable within its power and to require of its employees, contractors, and employees of contractors to do all reasonably within their power, both independently and upon the request of the Forest officers, to prevent and suppress forest fires upon and near the lands to be occupied under the permit

ART. 23. To pay in advance, as required by the Secretary, to the United States depository or offices as above set forth in article 10 hereof, to be placed to the credit of the United States, the full value as fixed by the Secretary, of all timber

cut, injured, or destroyed on National Forest lands in the construction, maintenance, or operation of the project works.

ART. 24. To pay, on demand of the Secretary, to the United States depository or officer, as above set forth in article 10 hereof, to be placed to the credit of the United States, full value for all damage to the lands or other property of the United States resulting from the breaking of, or the overflowing, leaking, or seeping of water from the project works constructed, maintained, and, or, operated under the permit, and for all other damage to the lands or other property of the United States caused by the neglect of the permittee or that of its employees, contractors, or employees of contractors.

ART. 25. To indemnify the United States against any liability for damages to life or property arising from the occupancy or use of National Forest lands by the permittee.

ART. 26. To sell power to the United States, when requested, at as low a rate as is given to any other purchaser for a like use at the same time and under similar conditions, if the permittee can furnish the same to the United States without diminishing the quantity of power sold before such request to any other customer by a binding contract of sale: *Provided*, That nothing in this article shall be construed to require the permittee to increase its permanent works or to install additional generating machinery.

ART. 27. To abide by such reasonable regulation of the service rendered and to be rendered by the permittee to consumers of power furnished or transmitted by the permittee, and of rates of payment therefor, as may from time to time be prescribed by the State or any duly constituted agency of the State in which the service is rendered.

ART. 28. (Superseded by attached form of art. 28.)

ART. 29. That in respect to the regulation by any competent public authority of the service to be rendered by the permittee or the price to be charged therefor, and in respect to any purchase or taking over of the properties or business of the permittee or any part thereof by the United States, or by any State within which the works are situated or business carried on in whole or in part, or by any municipal corporation in such State, no value whatsoever shall at any time be assigned to or claimed for the permit, or for the occupancy or use of national forest lands granted thereunder, nor shall the permit or such occupancy and use ever be estimated or considered as property upon which the permittee shall be entitled to earn or receive any return, income, price, or compensation whatsoever.

ART. 30. That the works constructed, or to be constructed, maintained, and, or, operated under the permit will not be owned, leased, trusteed, possessed, or controlled by any device or in any manner so that they form part of, or in any way effect any combination in the form of an unlawful trust, or form the subject of any unlawful contract or conspiracy to limit the output of electric energy, or are in restraint of trade with foreign nations or between two or more States or within any one State in the generation, transmission, distribution, or sale of electrical or other power.

In witness whereof the permittee has executed this stipulation on the —— day of ——, 19—.

[SEAL.]

By ----------

Attest:

Secretary.

ART. 28. That upon demand therefor in writing from the Secretary to surrender the permit to the United States or to transfer the same to such State or municipal corporation as the Secretary may designate, and on the conditions specified in this paragraph; also to give, grant, bargain, sell, and transfer with the permit (upon such demand and upon said conditions) such works, equipment, structures, and property then owned or held and then valuable or serviceable in the generation, transmission, or distribution of electrical or other power, and which are then dependent in whole or in part for their usefulness upon the continuance of the permit, as may have been determined by agreement with the Secretary and embodied in the aforesaid stipulation: *Provided, however*, That such agreement and such stipulation shall include only complete units of construction or of development: *And provided further*, That if such agreement or stipulation shall not include all such aforesaid works, equipment,

structures, and property as are dependent in whole or in part for their usefulness upon the continuance of the permit, the permittee shall waive all right to demand or receive consequential damages for the severance of any property taken under the provisions of this paragraph from any property not taken. The Secretary may require such surrender if the United States shall desire to take over the permit and properties, or he may designate as such transferee any State or municipal corporation which shall desire such transfer: *Provided, however*, That no municipal corporation shall be so designated unless by proceedings in a court of competent jurisdiction it shall have been determined that such a municipal corporation has the right to acquire such property: *And provided further*, That no municipal corporation shall be so designated unless it also has the power to acquire the said property and rights of the permittee in accordance with the following conditions: Such surrender or transfer shall be on condition precedent that the United States or such transferee shall first pay to the permittee the reasonable value of all said works, equipment, structures, and other tangible property and, in addition thereto, a bonus of three-fourths of 1 per cent of such reasonable value for each full year of the unexpired term of the permit. Such reasonable value shall not include any sum for any permit, franchise, or right granted by the United States, by any State, or by any municipal corporation in excess of the amount (exclusive of any tax or annual charge) actually paid to the United States or to such State or municipal corporation as the compensation for the granting of such permit, franchise, or right, or any sum for any other intangible properties or values whatsoever, it being the intent of this paragraph that all such intangible values shall be covered by the bonus herein provided for. Such reasonable value shall be determined by mutual agreement between the parties in interest and, in case they can not agree, by a board of arbitration of three members, one of whom shall be named by the permittee and one by the transferee; the third shall be either the Secretary or some representative whom he may name. The reasonable value, for the purposes of such determination, of such works, equipment, structures, and other tangible property shall be the actual and necessary cost thereof or, if such original cost can not be determined with reasonable certainty, shall be the cost of reproduction of such works equipment, structures, and other tangible property under substantially the same conditions as existed at the time of the original construction and at prices for labor and material which shall be the average of such prices for the five years next preceding the date of valuation, less a percentage of such original or such reproduction cost equal to the per cent of physical and functional depreciation of the existing works, equipment, structures, and other tangible property.

Form 62.
(Revised Dec. 20, 1913.)

UNITED STATES DEPARTMENT OF AGRICULTURE.

FOREST SERVICE.

----------, Water power.
(Name of Forest.)

---------- ---------- ----------
(Name of applicant.)

---------- ----------
(Use applied for.) (Date of priority of application.)

FINAL POWER PERMIT.

Whereas the ——— Company (hereinafter called "the permittee") filed with the district forester at ——— on the —— day of ———, 19—, in accordance with the regulations of the Secretary of Agriculture (hereinafter called "the Secretary") under the act of February 15, 1901, an application for permission to occupy and use, for the development, transmission, and distribu-

tion of power, certain lands of the United States within the ——— national forest, in the State of ———, and more particularly described and shown by the maps, field notes, plans, estimates, and data accompanying the said application; and

Whereas the aforesaid maps and plans, as hereinafter specifically described, have been adopted by the permittee as the maps of the approximate final location and as the approximate plans of the project works which the permittee proposes to construct under this permit; and

Whereas the permittee has paid to the ——— National Bank of ——— (United States Depository), to be placed to the credit of the United States, the sum of ——— dollars ($ ———); and

Whereas the permittee on the —— day of ———, 19—, executed, and on the —— day of ———, 19—, filed with the district forester at ———, a stipulation required by the Secretary as a condition to the issuance of this permit;

Now, therefore, I, ———, Secretary of Agriculture of the United States, in accordance with the authority conferred upon me by the act of February 15, 1901, do authorize the permittee, subject to the regulations of the Secretary and to the provisions hereinafter set forth, to occupy and use the lands hereinbefore referred to, and to construct, maintain, and, or, operate thereon, for the purposes in article 1, below set forth, the following project works:

(Cancel such of the four following items (*a*), (*b*), (*c*), and (*d*) as may not be applicable.)

(*a*) ——— (masonry, earth, etc., diverting or storage) dams approximately ——— feet in maximum height and approximately ——— feet in maximum length, to form ——— reservoirs to flood approximately ——— acres at spillway level, respectively,[1] in section ———, township ———, range ———, ——— meridian, of which total of ——— acres approximately ——— acres are national forest land, said dams and said reservoirs being designated, respectively, as follows: ———

(*b*) ——— water conduits approximately ——— miles in length, respectively,[1] crossing sections ———, township ———, range ———, ——— meridian, of which total ——— miles approximately ——— miles will cross national forest land, said water conduits being designated, respectively, as follows: ———

(*c*) ——— power houses and appurtenant structures to occupy approximately ——— acres, respectively,[1] in section ———, township ———, range ———, ——— meridian, of which total of ——— acres approximately ——— acres are national forest land, said power houses being designated, respectively, as follows: ———

(*d*) ——— transmission lines ——— miles in length, respectively,[1] crossing sections ———, township ———, range ———, ——— meridian, of which total of ——— miles approximately ——— miles will cross national forest land, said transmission lines being designated as follows: ———

All as approximately shown upon certain maps and plans executed by ——— on the ——— day of ———, 19—, which maps and plans are filed together herewith and designated as follows: ——— (designate each original of map or plan as "Exhibit A," "Exhibit B," etc., following each such designation by the title of the map or plan, as "Exhibit A," Map of location of, etc.; "Exhibit —," Plan of, etc.), which maps and plans, together with certain other data designated as "Exhibit —," (designate each exhibit by letter and name, as "Exhibit M, Field Notes," "Exhibit N, Estimates and Data," etc.), are hereby made a part of this permit.

ART. 1. The project works to be constructed, maintained, and, or, operated under this permit shall be constructed, maintained, and, or, operated for the purpose of storing, conducting, and, or, using water for the development of power or for the purpose of the transmission and use of said power.

ART. 2. Unless sooner revoked by the Secretary this permit shall terminate and become void on the —— day of ———, 19—, but on said date may be deemed to be an application by the permittee for a new permit to occupy and

[1] If land is unsurveyed, substitute for the description by legal subdivisions in paragraphs (*a*), (*b*), (*c*), and (*d*) the following: "Located on certain lands described and shown by the maps and field notes accompanying the application filed with the district forester on the —— day of ———, 19—."

use such national forest lands as are occupied and used under this permit: *Provided*, That the permittee shall, not less than two (2) or more than twelve (12) years prior to the said date, formally notify the Secretary that it desires such new permit, and shall comply with all laws and regulations at such time existing governing the occupancy and use of national forest lands for power purposes.

ART. 3. Any violation of or failure to comply with the provisions or conditions of any article of the aforesaid stipulation, whether or not such article provides that such violation or noncompliance shall result in the revocation of this permit, shall be deemed and taken to be a sufficient cause for such revocation; but *it is understood* that the statute under which this permit is issued provides—"that any permission given by the Secretary of the Interior (Agriculture) under the provisions of this act may be revoked by him or by his successor in his discretion."

No revocation, however, of this permit, either in whole or in part, will be made until after due notice thereof has been served upon the permittee, and until after the permittee shall have been given a reasonable time, not to exceed ninety (90) days after the service of said notice, within which to show cause why such revocation should not be made.

ART. 4. This permit and the permission granted hereunder to occupy and use national forest lands may be transferred to a new permittee under the following conditions, and not otherwise: The proposed transferee shall file with the district forester of the district in which the lands to be occupied are situated the decree, execution of judgment, will, proposed contract of sale, or other written instrument upon which the proposed transfer is based, or a properly certified copy thereof, also an application by the proposed transferee in the form of a stipulation binding the proposed transferee to the performance of such new and additional conditions expressed therein as the Secretary may deem necessary; and thereupon the Secretary may, in his discretion, approve in writing the proposed transfer, and after such approval the transferee shall succeed to all the rights and obligations of the permittee, subject, however, to such new and additional conditions as shall have been embodied in such stipulation and so approved.

ART. 5. Any power project, permission to construct which is granted by this permit, or any part of such project, may be abandoned by the permittee upon the written approval of the Secretary after a finding by the Secretary that such abandonment will not tend to prevent the subsequent development or use of such power project or part thereof so abandoned, and after the fulfillment by the permittee of all obligations under the aforesaid stipulation, in respect to payment or otherwise, existing at the time of such approval.

ART. 6. Upon the voluntary abandonment of the occupancy and use of national forest lands, as authorized by this permit (except as provided for in article 4 hereof), or upon the revocation of this permit, or upon the nonexecution of a new permit at the termination of this permit, all permanent project works which have been constructed under the authority of this permit, such as reservoirs, dams and operating mechanism, water conduits and operating mechanism, power houses, and other buildings, shall become and remain the property of the United States: *Provided, however*, That if said revocation or abandonment shall, as provided for in the aforesaid stipulation, affect only a part of the project works, the construction of which is authorized by this permit, the provisions of this article shall apply only to such parts of said project works as are affected by such revocation or abandonment. The mechanical equipment of power houses shall remain the property of the permittee, and may be removed within a reasonable time, not to exceed six (6) months after such abandonment, revocation, or termination, unless other disposition of such equipment is approved by the Secretary.

ART. 7. This permit is subject to all prior valid claims and permits which are not subject to the occupancy and use hereby authorized.

In witness whereof I have hereunto set my hand this —— day of ———, 19—.

Secretary of Agriculture.

STATEMENT OF HON. ELIAS M. AMMONS, GOVERNOR OF THE STATE OF COLORADO.

Gov. AMMONS. Mr. Chairman and gentlemen, I have two documents I want to leave with you. One is a brief on the general idea of leasing for water-power development, which I desire to leave with the committee in case it may not have been called to the attention of the members, and the other is a very short set of resolutions. This latter I especially would like to have in the record. It is entitled "What the West wants," as agreed to by the various western governors at their last meeting. It was agreed to unanimously.

Senator SMOOT. Have you more than one copy of that brief you speak of?

Gov. AMMONS. I have two. I would be very glad to let you have those, and I can telegraph and have a few more sent.

Senator ROBINSON. Whose brief is it? Was the Government a party to the suit?

Gov. AMMONS. It was prepared by Mr. Bailey and a number of other attorneys, including former Chief Justice Hayt, of Colorado, Clyde Dawson, of Denver, and others of the ablest attorneys we have. It presents the very vital question of this matter of leaseholds.

Senator SMOOT. I have a copy of that brief, and I think every member of the committee ought to have one, and that is the reason I asked you the question.

Gov. AMMONS. I will leave this with the committee. I have one other with me that I will bring to you some time to-morrow. I haven't it in the room. I will get it, however, and if you desire some more copies I will telegraph and get such copies as are available. I really believe, Mr. Chairman, that every single member of this committee ought to read that from one end to the other, because it touches the very vital questions in this matter.

Senator WORKS. It might be well to supply a copy to each member of the committee.

Gov. AMMONS. I will be very glad to do so if there are enough copies to be had.

Senator NORRIS. I would like to have it, if you can do that.

Gov. AMMONS. I left with the House committee last spring a shorter brief, of which I have forgotten the title, but that is not so complete as this.

Senator SMOOT. Is this the amended brief of Mr. Bailey, Governor?

Gov. AMMONS. This was just published this year.

Senator SMOOT. Yes; I see it is the amended brief.

Senator NORRIS. This is a brief in a law suit that was pending?

Gov. AMMONS. Yes, sir.

Senator NORRIS. Could we not have the briefs on the other side also?

Gov. AMMONS. That I do not know. I have not with me copies of it.

Senator NORRIS. Of course, this brief was prepared by the attorneys in that case and represented only one side of the issue involved?

Gov. AMMONS. Yes, sir.

Senator CLARK. Representing the side, I presume, with which the governor agrees?

Gov. AMMONS. Absolutely. I certainly would not present it otherwise.

Senator ROBINSON. Who was the suit against? Was the public interested in the case?

Gov. AMMONS. There is probably some material here which neither I nor any of the members of this committee may be interested in, but it is a full development of this question of ownership and control of water power, relating to the laws that have been passed, and dealing with the situation as it now obtains in the West.

Senator SMOOT. Particularly in relation to the law of 1866?

Gov. AMMONS. Yes, sir; it takes in those things. It takes them all into consideration.

Now, Mr. Chairman, I understand this committee has fixed an hour at which it will close this hearing. There are no doubt many who desire to be heard, and I have no disposition to take up unnecessary time nor to bore the members of the committee. I have come with my successor, Hon. George A. Carlson, of Colorado, who will take office on the 12th of January as governor of the States of Colorado, 2,000 miles, for the reason that we feel that our State, as well as the whole West, is intensely interested in the legislation which is proposed here.

If we are to go upon a leasing basis under the Federal Government perhaps this bill, in many respects, is as good as we could expect. I am not going into details that engineers and attorneys might be much better able to discuss, but I do want to bring to the attention of the committee as earnestly as I am able to do some of the vital things in the bill, some of the things that go down to fundamental principles, so far as my State is concerned.

I desire at the outset to say that I am not very well acquainted with other States. I believe I do know my own State very well. I have lived there for 44 years. I know all portions of it—not everything about each portion, and not all about any one thing, perhaps, but as to the general situation in my State I am well acquainted.

What we fear and what we have feared for a long time is the passage of any bill that includes this leasehold principle. We believe, and we have been led to believe from the experience of past years, that whether it is in a matter of radium or a matter of coal or a matter of oil or a matter of clay, or whatever is passed to establish that principle here, is only the beginning of the end, and that if this water-power bill and this coal-leasing bill pass now they will be followed by the other bills from the House putting every other resource we have upon a leasehold basis.

One of the Members of this Senate, Mr. Shafroth, at that time representing Colorado in the House of Representatives, told me a dozen years ago that the system once begun would never stop until it included the precious metals.

The water situation is somewhat peculiar in Colorado. Our State is at the top of the continent; our streams flow out in every direction, north, east, south, and west. There is no considerable stream except one, which crosses the extreme northwestern corner of the State, which does not rise in Colorado. According to the Geological Survey, as I recall the figures—I have not seen them for sometime—we

have a possible water-power development of something more than 2,000,000—as I recall it—2,117,000. Of that amount only about 80,000 has been developed, and not even that is entirely in use at the present time.

So this question is a very important one to us. We have peculiar natural conditions in our State. It is not like Illinois or other Mississippi Valley States, whose whole surface is agricultural—not by any means.

If we are permitted to develop water by accumulative storage and to use all the water in our State that rises in it, we may ultimately be able to irrigate all of our tillable lands, which would be from 15,000,000 to 20,000,000 acres, out of a total area of 66,000,000 acres. We are now irrigating but little more than 3,000,000 acres in the State. So you see if we are going to support a State government out there we must find some other use for the forty and odd million acres that are left, so that they will pay their fair share of the taxes necessary to support the institutions of the State. That is not counting the cities and towns.

Fortunately, while Colorado was not made entirely an agricultural State, we were given some resources in place of the farming lands. These were minerals of one kind or another. I imagine that there is no one in this committee who would urge that our State should support itself on the 20,000,000 acres of agricultural lands, including the cheap pasturage lands in the State, or maintain that it would be possible to do so, and there must be some revenue from these other lands.

The vital question with us is, How is this all to affect our State? This list of bills provides for the withdrawal and putting on a leasehold basis in one form or another of practically every acre that is now left in the public domain in my State. I believe, from what I know of the conditions there, the situation is similar in the other public-land States. Our State has to support some institutions unnecessary in other portions of the country. An irrigation school is not needed in Iowa, or in Indiana, or Ohio, or any of the East Atlantic States or the Southern States. But it is just as necessary with us as any other educational institution we have, and it is an exceedingly expensive one to maintain. Many of those States need no school of mines. But you must recollect that within our borders have been discovered already more than half of the known minerals of the world, and perhaps more than three-fourths of the more useful metals of the world. Therefore we must have a school of mines; and we have one, and a good one. It is expensive to keep it up, and we find that we are compelled from necessity to carry on extension work in minerals, but we are beginning to do it, just as we are in agriculture, in order that we may help the prospectors to discover those minerals and lend a helping hand in producing them when they find them. That is expensive. We maintain in the State capital a most expensive department of mines, or bureau of mines, and it is necessary to do that. We have to raise the necessary money to meet these expenses through taxes. Shall not the mineral lands pay their share of it?

Then go back to our agricultural college. I recently visited my neighboring States of Nebraska, from which comes one of the members of this committee, and Kansas, and have observed the work

there. It goes along certain lines of agriculture, because those are the only ones that are necessary in those States. They are doing splendid work. They are spending more money, because they have more taxable property than we have, along those special lines. But what have we to maintain in Colorado, for instance? Why, we have every single agricultural problem on this continent north of the cotton belt, and we have to take care of it if we are to use all of those possibilities and if we are to solve those problems. So that our range of work in our agricultural college is much wider than in the States to the east of us. You can live in the Arctic Zone in Colorado so far as weather conditions are concerned, or you can live in just as warm a climate as any human being wants to live in, unless he is compelled to go to a hotter one. We have all those things, and therefore we must put up more expenses. It is necessary to take care of the sugar beets, the alfalfa, and the high-altitude crops.

Do you know that in Colorado there are no two valleys of the same altitude that have exactly the same agricultural problems?

Senator SMOOT. What is your population?

Gov. AMMONS. Eight hundred thousand at the last census; almost exactly, on 66,000,000 acres, or less than 8 to the square mile of territory. One-fourth of our population, furthermore, lives in one city.

Senator SMOOT. And the whole of it is 25 per cent less than the population of Philadelphia.

Gov. AMMONS. Yes.

And, Mr. Chairman, right on that point I want to say that nineteen-twentieths of the taxes of our State come off of about one-eleventh of the territory, and that only a small fraction over 32 per cent of the territory of our State is now on the tax roll. More than half of that is cheap pasture land; and yet we are attempting to maintain all those institutions out there that other States are maintaining. It is a terrific burden, unless we can get these other resources to pay their fair share of the taxation in Colorado.

I have said there were about 80,000 horsepower developed on the streams in our State. There is a great deal of fall to the streams from the range to the foothills. We have a large number of canyons, and the fall will take in the foothills on the eastern slope, and at the foothills the altitude will range along on the average, where the streams come out, about 5,000 feet above sea level. There is not much added to the stream flow down near the foot hills, but most of it comes from high up, so that a large portion of this water starts from near timber line, and especially during the dry season.

It is exceedingly important, if we are to get the fullest development of this water power, that the first right and the first use of the water and its first storage shall be near the headwaters of the streams. Our experience has proved that. You can readily understand that if the first storage of the water shall be beyond our boundaries, as it is proposed to make it on the Rio Grande at Engle or Elephant Butte, some 300 or 350 miles below our State line, the water-power possibilities toward the headwaters of that stream are practically impossible. Yet I defy anybody to get a right of way for a reservoir toward the head of that stream. It can not be done. I am hoping that will be changed. You can understand that our streams out there are high in the spring and very generally low toward the end of the summer, and in the fall and winter months. In order

to get any power development of consequence that would pay commercially, you must equalize the flow of those streams up near the headwaters. -If you equalize them up there where there is plenty of fall it will equalize them all the way below, and the only danger there is of any monopolization of water powers is by making a first storage right down at the lower end of the stream. Of course it must be apparent to every member of this committee that if a company goes to the head of the Platte, or to the head of the Grand, or to the head of the San Juan or the Rio Grande and equalizes the flow up there first, the water can not be held after it goes through the wheels the first time. The flow is equalized for every other person below and it can be carried out and used over and over and over again. That is the only way in which we can get the fullest utilization. The man who builds the first reservoir to equalize that flow is in the position of having to compete with the other people below, and how is he going to get a monopoly out of it? This water is not destroyed, Mr. Chairman, especially if used for power purposes—not a drop of it—perhaps no more than it is if it goes down the stream, and the greatest blessing that could come to us is that we should be permitted to work this problem out just as we have worked out our irrigation out there, so that we could use the water over and over for power purposes, until it leaves the hills, and then use it over and over again for irrigation purposes.

I know there is a popular feeling that our water has all been appropriated long ago. I can recollect when I was a boy, the first year I was in Colorado, there was more quarreling over the water in the Platte for irrigation purposes than there is to-day, and yet there were just little patches along the stream that were irrigated. The reason is easy to ascertain. The water had not been interfered with in the spring, when the snow melted and it came down in great torrents to swell the floods all the way to the mouth of the Mississippi. This first irrigation was very close to the river. The water drained back quickly and did not affect the river very much, except temporarily. That condition was not remedied until there was brought about this wise use at the head of the stream. And that began accidentally in Colorado. We commenced to build reservoirs to store the water and we carried the ditches farther out, but only a portion of it was used. The balance sank into the earth, gradually drained back to the stream to be taken out lower down the river, until we have this improved condition to-day. I will illustrate it by one stream, the Poudre, which flows into the South Platte at Greeley. Approximately 35 years ago to-day they were using all the water in the season when it was needed for irrigation, and they were irrigating 15,000 acres of land in that valley. They thought this amount never could be increased. But, gentlemen, to-day they are irrigating 300,000 acres of land, and twice as well, from the same stream. And they have done that by this accumulative storage of the flood waters.

It is only a flood-water proposition, and this power scheme is one of the handling of these flood waters in the same wise way, that is all. I have said it before. I have heard eminent gentlemen in the employ of the Federal Government, in the study of this situation, say the same thing, that the reason Colorado has become a dry State was because for untold centuries more water went out each year than

came into it. Now we are reservoiring it, and not as much water in the aggregate goes out of Colorado each year as did before we began irrigating. We are making more use of it every single year, and it must be quite evident if we can continue the present plan, and we can if you will only let us, instead of 3,000,000 acres of land under irrigation in Colorado we will double and quadruple that quantity. There is water now in use in Colorado that will not go beyond its boundaries for 25 years, or maybe 50 years, and which will be used every year. We are not injuring the other States by this and we will not with the power proposition. When I was a boy you could go to the Nebraska line, at Julesburg, in the dry season, and you would have had to dig a well in the bottom of that river to get water to camp with. No such condition exists to-day. There is a good river, no matter how dry the season is, going out into Nebraska. But the difference is in the flood waters in the spring, and these people who want to save the destruction of property down toward the mouth of the Mississippi River can do no better than support Colorado in her policy of holding back these flood waters up there so as to prevent the great floods in the spring and at the same time send them down in the dry season an added supply of water, to their benefit.

Senator NORRIS. And thereby improve navigation.

Gov. AMMONS. Yes, sir; and at a time when they need it. And, gentlemen, this is not a theory, it is the practice, it is the result of the practice, of personal experience, of problems which we have worked out with our own hands since 1859:

Senator WORKS. It has been found, has it not, Governor, that the water that you use for irrigation, that is stored during the winter season, naturally increases the flow of the water in the stream below?

Gov. AMMONS. Yes, sir.

Senator WORKS. In other words, it finds its way back into the stream farther down after it is used for irrigation?

Gov. AMMONS. Yes, sir.

Senator WORKS. And you are delivering additional water into the State of Nebraska in the same way, are you not?

Gov. AMMONS. Yes, sir; absolutely; and in all the other States.

There are streams along the Platte which, when I was a boy, were absolutely dry except when there was a heavy rain or when the snow was melting, and to-day they are steady streams of water, and the most valuable water rights that have been gotten out of those and other numerous streams have been where no one ever supposed such a thing would be possible. And it is all because this water, when it goes down into the ground, forms springs and comes back. It is plain to be seen that we have not hurt anybody. We have done this with this surplus water, because, as I have already pointed out to you—a fact which I know from personal experience—they were using that low stream flow 43 years ago last summer.

The same principle will apply to water-power development. You must commence the use up at the headwaters of the streams; that is, within our State. Our streams all rise up near the center of the State, and they run in every direction. If we are going to get the best benefit out of those waters we must store them up there first, develop our power, and then perhaps re-store, because for power development the streams must run steady during the year. We will

probably have to re-store for irrigation purposes, for there is where we need the water for only three or four months—the bulk of it during the summer time. There must be a double storage of that water, but it must be evident to you that unless you can get the use of the waters up at the headwaters you can not get double use, and you can no get either use if the same principle is applied as is applied on the Rio Grande to-day under the Reclamation Service. It is an utter impossibility.

Senator NORRIS. That principle was adopted, if I understand it, in order to satisfy the claims of the State of Texas and Mexico, and you were not permitted to store the water.

Gov. AMMONS. No. They have come in and interfered with us in the San Luis Valley, which contains the headwaters of the Rio Grande. We started in to store the water, but we could not get very far: we could not get the rights of way, so that storage can not be made. They are compelling us to allow that water to go down the river untouched, and it goes to the Engle Dam, 300 or 400 miles below the Colorado line.

Now let us take the San Luis Valley just for a moment and consider that. There are 3,000,000 acres there, most of it so level that no human being can tell which way the ground slopes. I can show you a ditch there that runs 26 miles on section lines without a bend, and there is not too much fall and it is not too level. There is a stretch of railroad 56 miles long without a cut or fill of any consequence, and without a bend. It is perfectly level. It is all splendid soil. There is enough water going down into that valley to irrigate it all if it were properly stored, and there are tremendous power possibilities just back of that storage, if that is permitted.

As it is, we are successfully irrigating about one-sixth of that territory. We can not get any more rights of way and we are compelled to allow the water to go down to the Engle Dam. I believe that the engineers that have recently been there are going to take these facts into consideration. The present indications are that they will recommend something different from what has been done in the past, and I hope they will. I think they are looking into the question and finding out the facts, and we are hopeful that they will report that this water ought to be stored at the head and used first for power, then to irrigate this land, and then, by a proper drainage system, carried back into the river and allowed to go down and fill the Engle Dam and furnish the farmers of that valley with all the water they need. It will all be equalized, and we will develop our 3,000,000 acres of land. The water can be used again and again until it gets to the sea. We will be glad to take care of the expense of that first storage, but the Government can help us in the drainage work. On account of the level condition of the country, the land must be drained. There are between 600,000 and 800,000 acres of land evaporating a supply of water that is equal to at least an acre-foot to each acre, or enough to raise a crop on the same amount of ground.

I want to say right here, Mr. Chairman, that if these bureaus that are operating out there would join with us in the storage, cooperate with us in San Luis Valley, help us get these drainage canals back into the river, that they will get more water for the money expended

than they will get anywhere else in this country that I know anything about. Furthermore, they will permit us to develop this whole 3,000,000 acres of land. They will get more water than they will under the system that has been proposed, and everybody will be benefited to the fullest extent. But if the present policy is pursued we will have no power possibilities of commercial value at the head of the head of the Rio Grande. We can not develop any more of the agricultural land in there and nobody will be benefited below us, either.

Senator WORKS. To what extent do you pump water for irrigation in Colorado?

Gov. AMMONS. We are just beginning to pump. We are doing quite a good deal in this starting development which is certain to be of great importance, from the fact that the water table is gradually being raised toward the surface so that pumping will not be so expensive. For instance, in northeastern Colorado, where we are carrying ditches far from the stream, this water table is getting close enough to the surface to permit the water to be pumped at very little expense. In very many cases hundreds of thousands of acres can be irrigated cheaper by pumping water than if a gravity flow could be gotten from the river.

Senator WORKS. Have not your valleys gradually been filled up so that water can be pumped from them for irrigation purposes?

Gov. AMMONS. I am saying that our water table is being raised closer to the surface. For instance, we can put it up on this tract [indicating] this year, and perhaps it may be raised to the next piece next year and be pumped there. We will ultimately irrigate from one-fourth to one-half of all the land we irrigate in Colorado from these pumping systems.

And here is where this water-power situation is important to us: We want to harness the water in the mountains for its use for irrigation; we want to generate the power and send it down on wires to the valleys to raise the water there cheaply. That is what we want to do. We are working that out. If we are left alone we will do it to the benefit of everybody. We want that water power for that purpose just as cheap as we can get it.

Now, on this matter of monopoly I have already said something. I have just read your bill; I saw it here this morning. I had read it some time ago, but I took pains to go over it again this morning.

You can have the same provisions against a monopoly under private ownership that you can have under a leasehold proposition, and you can make it just as effective. Then our jurisdiction extends over it, and you will have no other troubles of a double jurisdiction. There is nobody in our State that I know of but wants to prevent monopolization of anything we have. Gentlemen, if you are going to prevent monopoly, there is one way to do it, and that is to limit ownership and control. Why not do it in a straightforward manner, and go right at it and do it, and say a company shall have so much and no more?

Senator SMOOT. Or else by regulation.

Gov. AMMONS. Yes.

On this point of regulation, I want to say that our State has been condemned very much by certain people and by those who are trying to start new enterprises because we have gone too far in so-called

progressive legislation. We have been criticized tremendously. It has been difficult to raise money because we have gone so far in restrictive laws. This year we have put into effect a splendid public utilities law covering all of these subjects—regulating the prices and the service. This winter I am sure—because it was done before, but in a defective manner, so that the bill had to be vetoed—we are going to regulate the organization of all sorts of corporations out there to prevent the watering of stocks.

Gentlemen, our people out there are not savages; they are just as far advanced as you are in the East. They are just as much interested in good laws as you are. They have the advantage of being right there on the ground, and they know what is needed better than you can possibly know it. Our people are going to make their laws to fully meet all these matters, and they will do it so that it will not hurt anybody. They are going to do it as experience points out the way. And on this water question our constitution provides a protection that a thousand bills like this would not provide. It provides that there shall be no ownership in the water, and that you can only hold it while you use it. You can not go there and locate all those sites; you can not buy the ground and hold it as sites, and unless you can use it you can not hold it. Consequently development can not take place any faster than there is a market for the power. There is something you must not overlook. I believe that even when matters are coming up here that relate to the use of water in the West it would be a good thing to get copies of our laws, so as to learn what our customs and purposes are, and to see whether or not we are handling these matters in the wisest way.

Mr. Chairman, if 45 or 50 years ago somebody had gone down on the Nebraska line in Colorado, at Julesburg, and established a storage right for the waters of the river—and it could have been done at that time—the development of that magnificent valley, where 1,500,000 acres of land are in as high a state of cultivation as any on this continent where general farming is pursued, would have been impossible. Our experience worked out that problem. We did it with our own hands and we did it a little at a time, and if we are let alone we will go on working out the wisest policy in the best way, and in a way that would hurt nobody but would benefit all.

Now, I want to take up another question. I want to go into this matter of taxation a little further. I want to develop this idea in support of our State.

I pointed out to you that only a little over 32 per cent, or less than 22,000,000 acres of the sixty-six million and odd acres in the State, is on the tax roll. Now, what do we have to keep up? We have 35,000 miles of wagon road. We need fifty or sixty thousand more. We need the new roads just as fast as we can build them. Some of those roads are very expensive. I can take you over stretches of highway there that I have gone over this last year where it cost several thousand dollars a mile for miles and miles, without a dollar of taxable property on either side. Why? Because our communities have grown up in little valleys and groups scattered all over the State, and we must build roads in between. What have you put in this bill to help build those roads? You are putting a provision in here that the royalties provided shall go first into the reclamation

fund. Let me ask you a question there, Mr. Chairman, for information. I read a brief from the Secretary of the Interior this morning, in which he says that first the cost of administration should be taken out of the receipts. Is there an amendment to this bill purporting to do that?

Senator CLARK. There is not.

Gov. AMMONS. If that is not to be put into the bill I do not want to discuss it, but if it is I do.

Senator WORKS. We do not know what might be put into it before we get through.

Senator NORRIS. I wish you would go on and discuss it.

Senator CLARK. The suggestion has been made that it ought to cover the cost of administration.

Gov. AMMONS. Then I want to say that it is utterly useless to talk about the disposition of the surplus, because there won't be any surplus; there will not be a dollar of it left for roads or anything else. It will be exactly on the same level with the Forest Service; just as fast as they get the money they will put on more help. I assert that without any fear of anybody even attempting to contradict me, unless you could put on such a tax and collect it as would be prohibitive of its use. In my State about 25 per cent of the cost of the Forest Service is returned, and they are demanding more help all the time. I want to say right here, and I am willing to stake my reputation upon that point, that if this provision for expense is made there, there will never be any return. Just take the experience we have had, and I am basing my remarks entirely on that. The Government people out there, of course, are operating from headquarters here and are not able to administer those ditches that have been built as cheaply as the local people administer them. I am not saying this because we do not want help to build them, for we do. I am pointing out to you that you can not do things by a large municipality or large governmental powers that are not organized to do a general business. You can not do it as cheaply as the farmers themselves will do it. All you have to do to convince yourselves of this fact is to go over the ground and see what is doing; then you can not help but agree that I am right on that proposition.

They are asking for more and more appropriations every year for the Forest Service. How are you going to get that money? Suppose you quadruple the fees now out there; you will have such contention as you never dreamed of whenever you attempt that. It can not be done.

Senator SMOOT. It is at the limit now, is it not?

Gov. AMMONS. It is at the limit. They are spending four times as much as they are collecting, and what they are collecting in many instances is just as unjust as anything in the world could be.

Senator SHAFROTH. Gov. Ammons, as you were in a forest reserve when the reserve system was first established, I wish you would state the facts as to the fees that were charged at that time in contrast with what they are now.

Gov. AMMONS. That calls to my mind something that I would like to mention. I said at the outset that it is our view that whatever bill is passed here is only the entering wedge which establishes the principle. I recall very well the first application that I got for a permit.

I think I have it at home now. I am keeping it as a curiosity. It provided, among other things—this may not be the exact wording, but it gives the meaning—"I do hereby further agree that in case this permit is granted, I will pay such reasonable sum as the Secretary of the Interior may, in his discretion, seem just and reasonable in the future."

Senator CLARK. That was a permit for grazing, Governor?

Gov. AMMONS. Yes, sir: for grazing in the forest reserve. The people out there were very much opposed to that. They started in to fight it. The department realized there was going to be a tremendous fight against any fees. The cattlemen at that time provided the best protection against fire that the forest reserves have ever had, past or present. Their bread and butter depended upon it. They were willing to fight fires day and night, as I have done myself, time and again, without any expense to anybody. They had more interest than any man who is on a salary, and I care not where he comes from. The cattlemen objected very seriously to the tax system. Some of our Representatives and Senators protested down here, and the fees were withdrawn. The Government authorities said everybody would be permitted to go in without charge. They said they just wanted to know how many cattle went in, so that they might exercise control over grazing. So the people out there stopped their opposition and they allowed them to establish the permit system. As soon as it was thoroughly established they put the fees back into force. They have been increasing them ever since, and are going to continue to increase them just as fast as they dare.

The same principle will apply to every one of these bills, if they go into effect. We have a right to believe that, and I assert positively that it is the intention of the bureaus which prepared the bills that that shall be done, at least to the amount necessary to conduct the bureaus. The people of the country will object to taxing themselves for more money for running these institutions. I believe that no one will deny that.

Why, one of the first documents, Mr. Chairman, that was ever printed and sent out was after a commission had gone West to look over that country, and they capitalized these water powers rather crudely, it is true, for there had been no surveys out there, and they pointed out that they would get $30,000,000 a year out of them. They even capitalized the water that they were going to store by merely establishing timber reserves for irrigation purposes, and they were going to get $8,600,000 out of the already poor homesteader and the people out there who are trying to raise bread and meat for this great country. There has been time and time again since when they have been pointing out, by comparison with lands farther east, the profit that can be gotten out of land on a rental basis, giving the impression in the East that they can get just as much for Uncle Sam's land adjoining it.

I want to go ahead with this taxation matter, because it is a vital thing in this whole scheme, whether it relates to water power, coal lands, grazing lands, or any other kind of resources.

I made an illustration in the House hearings, and I want to make it here. Let us suppose that this table [indicating] represents a map of one of the counties in Colorado, and that half of it is agricul-

tural land and a little town or community, perhaps, and the other half is coal land. You put this bill into effect. You have got to keep a sheriff there, and he will be especially needed because of the coal camp that will be established over there. We will have to have a court, and we will especially need it because of those coal camps. We will have to support schools in that county by general taxation. We will have to pay our share toward a State insane asylum. And I am going to say that if you put the duty upon some of these officials out there to work out some plan that will harmonize our own State administration with this Federal law, there will be a lot of them that will need to go to the insane asylum before they get it worked out. They will have to pay their share toward our university and our agricultural college and school of mines, and our home for mental defectives, and our reformatories. But they do not pay any over there in the other end of the county. What has this end of the county got to do? It will be compelled to pay it all. It will therefore have to pay double taxation, and you can not get away from it, Mr. Chairman. But that is not the worst of it. These people over here in this end of the county must have coal. They go over there and get it, and pay this pittance of 5 cents or 10 cents a ton royalty for that. They pay the Federal tax. They not only thereby pay a double local tax, but they pay the Federal tax, too. Then they raise their live stock and their wheat and their dairy products and have to ship them 1,000 or 1,500 miles to compete with those who do not have to pay double or treble taxation.

Now, gentlemen, I do not mean to appeal to you to ask you whether that is fair or not. You know it is not fair.

We were not given land that we could raise crops on, but we were given these minerals in place, and we have got to have these mineral lands taxed or we can not afford to administer them. In Colorado we have just gone into debt three-quarters of a million dollars because of troubles in the coal district in that State. The coal lands are going to pay a mighty few dollars of that sum. You ask why not? Why, there is less than 3 per cent of the coal lands in Colorado that are in private ownership. Now, you are astonished at that, are you not? But that is a fact. Less than 3 per cent, and you will not get any more under such laws as we have in existence now or such as you are proposing or as are proposed—I hope you are not proposing them. We will not get any more, and yet nearly the whole population in some of these counties is on coal lands.

Let us go a little further in this taxation proposition. Suppose that you pass this law and a company of you gentlemen think that it is opening up the resources of the West, as it purports to do, and you club together some of your surplus funds and go out and start a coal mine on a part of this Government land. You are going to start to promote a mine. You are going to have a town. The first thing you have got to do is to build a little town there. You must establish a school and you must have police protection and a courthouse, and all that sort of thing. Where are you going to get your money to support them under a bill of this kind? There may be several of these camps started, and a new county. How are you going to support a county government and how are you going to contribute to the State government your share of its support? There is nothing in this bill providing that a single penny shall go to the support of

the State or the local governments. I do not care what the intention of this bill is, I feel that I can assert positively, without fear of contradiction from any source, that the only effect that it can have is to attack the very vitality of the State, the very sovereignty of these Western States. You can not get away from that proposition.

Now, gentlemen, in the county in which I live more than 80 per cent of the territory is apparently permanently withdrawn from taxation. It is an expensive community in which to build roads. It is a big county. There are only a few over 1,800 people in it. Three-fourths of the production from that county last year was from untaxed lands, and all that was paid was a royalty in one form or another into the Federal Government. They returned a little of that, yes; but did they return a cent to support the sheriff's office? Did they return a cent to support the courthouse? Not a cent. Neither do these bills—not one of them. Not one of them returns a cent to the State, unless there has been an amendment put in here very recently. No one has ever thought about these western States, which are struggling to build themselves up, and to build up this great country at the same time. I am going to tell you gentlemen here that I consider it an outrage if you pass these bills without giving at least 50 per cent to the States from the very moment that the bills are passed. They ought to have every dollar of it.

Senator NORRIS. Governor, on that point I would like to ask your judgment. Suppose the bills were amended so as to turn these funds over to the State, all of them; would that, in your judgment, be more or less than you would get if the land itself that the Government proposes to lease was taxed?

Gov. AMMONS. I think it would be very much less. I do not believe that we would get anything right away, anyhow, from these bills. There might be some little community arising, a new one, where they would need some coal, and they would go and get it; they would take this leasehold up.

Senator NORRIS. I am speaking particularly of this bill now pertaining to the water-power sites.

Gov. AMMONS. I do not think we would get anything of consequence for a while. We have got to build those other industries in which are other resources, like coal and other metals, before we can get any market of any consequence for the water power.

I have already explained, Senator, that we are not using all that is now developed. We are not using all of our developed water power, and it is cheap, too. The reason is that our mineral development has stopped very largely since the forest reserves were thrown down like a wet blanket over all the mineralized lands of our State. You can not operate coal lands under the present laws at the price at which it can be sold. You are withdrawing oil lands. You are withdrawing everything that anybody wants. You can not build a population, and therefore you can not build up a use for the water or market for it. That is the trouble. So that, no matter how you proceed along this line, you are hitting us a terrific blow. That is the reason we do not want to see any of these things done. I am willing that the water powers should be controlled, if you like, as to the amount of power that can be generated or controlled by any one organization. But why not take Senator Shafroth's bill? You could not have any monopolization under that. You might have it

under this bill, because you are depending upon some man's discretion. But under Senator Shafroth's bill you could not have it. If you want to limit monopoly, why don't you do that definitely, and fix a reasonable limit. I do not know that Mr. Shafroth has the right limit. You must allow a reasonable limit, because we want power just as cheap as we can get it. We want to manufacture a few things out there, and we can do it if we can have power cheap enough so that other people can not run in and undersell our manufacturers as they have done in the past. Why not limit this ownership and control and reopen to settlement these lands instead of following a theory that will not hold water?

There is another matter, Mr. Chairman, in addition to this taxation, that will arise to trouble you. I noticed a few of the remarks of the gentleman (Mr. Merrill) who preceded me about whether the States or the General Government should control the distribution of this power. I tell you that is a great question. Why not let that alone? We are taking care of it. We are doing it very nicely. We have an Interstate Commerce Commission here that I think we all have confidence in. The people have so much confidence in it that they allow them to increase some of the railroad rates without making a howl about it. They will take care of this power if it goes from my State over into Senator Norris's State, or from Nevada over into California. Our local utility commissions will take care of the distribution in the particular neighborhoods where they know what they are doing. We do not want to leave that with any bureau 2,000 miles away, even though it be composed of the wisest men on earth. We want to get that right down home, and we can do it, and we will do it. Until we show to the contrary you must take it for granted, gentlemen, that we are onto our jobs, and we are attending to our duties out in the West just as you are attending to yours in the East.

Here is another matter in connection with monopoly that I want to mention. I want to beg your pardon, by the way, for my rambling way of presenting my views. I can not, as some few of you know, see to read, and I can not refer to notes.

Here is a feature of monopolization that I want to bring home to you. We are told, and have been told, in all sorts of magazines and other articles and in books that the only sure way to prevent monopoly is to keep these lands and resources in public ownership. Now, is that true? If it is, what is going to become of all of the rest of this great country lying east of the Missouri and the Mississippi Rivers? Are you not able, under our form of government, to control the question of monopoly? I believe you are; I do not doubt it for a minute. I do not believe that the question of public or private ownership has anything to do with it, except that under a leasehold basis you can create a monopoly cheaper than you can on privately owned land. Just think of the destiny of this country if the leasehold theory is correct. I do not believe it for a minute.

Now, gentlemen, there is one solution that these governors have suggested, and that is the turning over of these public lands and resources to the States in which they are situated. I am told there is no use to propose it, because of the false sentiment which has been created in the East against the West.

I am not an old man yet. I am pretty wiry. I hope to live at least 20 years more, and I am one citizen of the West that will never let this be forgotten, that my State of Colorado has just as much right to its resources with which to build and support itself as has any other State in this Union to its resources. The old original States themselves made that contract and that promise to every new State that should come into this Union, that it should be admitted on an equal footing with the original States—not with the older States, but with the original States. The original States have their property to tax, and we must have ours or we can not support our State governments. I will tell you that whenever you attempt to adopt any principle contrary to that you are striking at the very vitality of those States.

Gentlemen, our people are just as loyal to the Federal Government as any other, in spite of some of these things that have happened in recent years. They are looking back here recalling the character of their fathers and their mothers and their brothers and their sisters, and they say, "Those were good people; they are not doing these things intentionally; they do not know; they do not understand." We in the West realize that the magazines are not open to us; that the press of the East is not open to us; that we can not have our story told except by the few people who are able to come East and speak by word of mouth. We know that. We realize it, and we are hoping that the time will come when the people of the East will understand and will not demand something from us that is unfair and unjust. Then they will make it right. It does not help things to recall some of the matters that have happened out West, but let me give you an illustration or two to show the unwarranted and unfair attitude of the public land bureaus toward the Western States.

We have—and I had something to do with that—established at our Colorado Agricultural College a school of forestry. One of the first things the Forest Service down here did was to go down to a private institution and make arrangements to have some of their young men educated there instead of helping us. But that was not the worst. We could have overlooked that, but as our institution was established right near the foothills and as the mountains climbed rather precipitously to timber line, we wanted stations at several altitudes, at which to make experiments and a study of forestry. We needed it. We had plenty of valley land. We had large varieties of trees growing there, and we wanted to see what might be done. We had taken up, through the head of the department, the Secretary of Agriculture at that time, the idea of getting his cooperation to bring trees from other similar climates where there was greater moisture in order that we might get a tree with a more rapid habit of growth, so that we could do something along that line. So we came down here. I came myself and went before the House committee and asked for a strip of land running up to timber line. They said they could not give us that. Then we asked for little stations along at different altitudes. Mind you, they had fourteen million and a half acres of land. Did they grant our request? Not at all. They made us pay $1.25 an acre for 1,600 acres of land. Is that the right spirit for a great Government to show toward a new State struggling to build itself, especially when

it is educating boys for the benefit of the Nation as well as the State?

They donated to us the old Indian school down at Fort Lewis, which was no more use to them. They gave us an absolute grant to it, unconditional, and before we could get possession of it the Secretary of the Interior said that he had discovered that there was probably coal under that land and tried to take it away from us. It was with the assistance, and only with the assistance, of that great statesman, Henry M. Teller, that we were able to prevent it. Yet they commanded us by the terms of the grant that we should educate the Indian children free of cost for all time to come, and nobody knows whether, in the next hundred years, we could get a dollar back out of that coal or not. But even that did not show the spirit so much as it was shown when they took everything off of that property that was movable and sold it for a song or shipped it away and put a former employee in there as an auctioneer. They not only sold the movable fixtures, but there was a pump, a brand new one, that supplied the buildings, that cost $550, which they sold for $1, and they commenced to tear that out before we could get there and get possession of it. Then, when the district attorney of the United States and the attorney general of Colorado joined in a letter to the department down here, protesting against it and calling their attention to what had happened, they got a curt reply that it was none of their business or ours.

Here is something else, just showing the spirit—and I think you ought to know it, gentlemen—toward us. Last year Congressman Taylor, of the House, introduced a bill opening up for summer homes a lot of that foothill territory which was not good for anything, not even for growing timber. There are a few scattering trees on it, but you could not probably get a dollar's worth of timber off an acre in the next 50 or 100 years. But it is desirable land for summer homes. We have a lot of friends down in California and Texas and Kansas and Nebraska, and from the East who want to go there and spend the summer in those hills where it is cool. They want these locations for summer homes. So Congressman Taylor introduced the bill allowing the summer homestead of 40 acres to each one of those people. That 40 acres can not be sold for another purpose. It can not be located under the present laws for any purpose.

The bill simply provided how people could take up the land for summer residence. It was not for the citizens of Colorado alone, but from anywhere else, so long as he was a citizen of the United States. It would have opened up 3,000,000 or 4,000,000 acres of land which would have been put on our tax roll with improvements and would have helped the counties in building expensive roads through the foothills.

Did the department recommend that bill? It did not. But I am reliably informed that they came back with a bill providing for very cheap leases for a number of years for these summer homesteaders. Tell me, Mr. Chairman, is that the right spirit to show toward us out there?

They tried to take the water right from the Teller Indian School at Grand Junction after they gave it to us, which would have left it utterly valueless.

I could give you illustration after illustration here for a week of that sort of conduct toward us. I have told you there is only 3 per cent of the coal land in Colorado in private ownership. I think it is acknowledged that there are 7,500,000 acres of Government-owned coal land in the State now. There are only a few hundred thousand acres that are in private ownership. There probably is not less than 11,000,000 acres of coal land in Colorado that belongs to the Government. Are you going to leave that immense resource perpetually off the tax rolls? If you put this bill into effect, there will only be a little of it used. Nobody can buy it at the present rate.

My friends, you have been paying too much attention to some of these fellows who are trying to scare the people of the country to death because they say our resources are going to be all exhausted. I want to make the observation in this connection that the wise Creator who made this earth knew what He was doing better than any of these faddists can tell Him. He did not make a world that was going to fall down. As the experience of the past has proven, when any resource has disappeared human ingenuity, human enterprise, human necessity has always found something to take its place and never something worse. And it is that very necessity that has made possible the great progress of the human race.

But let us leave that side for a moment. Why, I can recollect—and I think I heard him say this myself—when the great leader and father of this movement said that in 50 or 100 years the coal would all be gone. Just think of it. That would be a terrible calamity. We would all freeze to death. Why, Mr. Chairman, according to the United States Geological Survey—I think in the report of 1908—it is shown that in my own State there is known coal enough—and there is an immense amount that they have no knowledge of yet—to supply the entire world at the present rate of consumption for more than 300 years. And there is Senator Clark's State of Wyoming, up there just north of us, that has nearly 50 per cent more than our State has. I do not know how much Montana and the others have. So I am not the least bit afraid about the coal being used up.

The CHAIRMAN. Governor, I was just going to suggest that the committee is only considering the water-power bill at this time.

Senator SHAFROTH. Mr. Chairman, I suggested when I asked that Gov. Ammons be given time that he could make only one trip and that I wanted him to discuss both of these bills at the same time.

Senator CLARK. I think the governor's remarks are very pertinent to this bill, because this bill proposes to adopt a policy, and the result of this policy is what the governor is speaking of. I think his remarks are very pertinent to this bill.

Gov. AMMONS. Now, Mr. Chairman, I am not going to impose upon this committee, but I would like to make this observation: We live 2,000 miles away. There are those who have private interests who can afford to come down here. We are not so fortunate; neither myself nor my successor. We are fighting the policy, and we are fighting it with all the power within us and with all the earnestness we can command. There is not one iota of difference between any of these bills upon that policy, and it does seem to me perfectly pertinent, if we can demonstrate in one or the other the viciousness that we believe is in this policy, we should be permitted to do so. As I

say, I will not impose upon the committee. I will confine my remarks to just what you ask me to discuss and I will not go beyond that hereafter even if there is one of the other questions involved, but I will say what I have to say on that. Then I will leave it to our Senators and to Congressman Taylor, who speak with authority on this question, and I hope to Heaven that you will pay attention to them and not to those whose very jobs and very existence, even the very existence of these bureaus, depend upon the establishment and the continuation of this policy in this country.

A moment later I will go back to this water power. I would like, however, to say a word on the leasing of the public domain, because if you propose to pass this water-power bill you will have that here next. It follows just as the night follows the day. There is a well-laid program. We are not here, I am not here and can not be here during my term of office, and Gov. Carlson can not be here all the time, to watch this, but those who are at work on the other side are in this city on salary of the United States, and they can be before this committee and about the Members every day that this Congress is in session. There are men who have private interests who can afford to come here, but the poor devil of a homesteader can neither come nor can he provide for a hearing. I come before you to ask that you listen to those whom he has chosen officially to represent him, and I hope that you will hesitate a long time before you put a principle into effect out there that is going to rob him.

Now, we have got to raise money if we develop these water powers for the irrigation of our lands, for the supplying of our cities, and for manufacturing the other natural resources which are valueless without manufacturing establishments. We can not raise it without a certain tenure. I have heard that stated here in behalf of the Forest Service. I heard it a while ago. Why not make that certain? Why not open it where it was? Are you afraid of monopoly of land out there? Why, Mr. Chairman, the average acreage of our holdings out there is going down constantly. It is not increasing. Look at the United States census and you will find, I think, that they fell off more than one-fourth in the last decade. As those lands become valuable they are not congregated, they are separating. That is true with our lands and our water powers. It is just as impossible to monopolize our water powers as it is to monopolize the air out there. But if you are afriad of it, pass Senator Shafroth's bill. That will prevent any possibility of it. You are not doing that under this bill, except to some favored interest. Open it up, just as it was, and let the little fellow and the big fellow go there, and let each take it as he finds it. I want to tell you, gentlemen, that it did not make our people feel comfortable when a President, a former President, of the United States stood up in the auditorium in Denver and said, "You people may own the water, but we own the land, and I do not see how you can use the water unless you make terms with us for the land." Is that a good policy to pursue? Is anybody ready to stand up and defend that?

Gentlemen, just let us work out this water problem in Colorado. Turn these lands, these resources, and this water over to the State in fact as you have done by statute. You have got a question of jurisdiction here. Did you ever think of that? Suppose you grant a leasehold to somebody for a reservoir site upon the head of the

Platte River, and he builds it, and I have a water right down the river farther, and I think my water is running short. I complain, and our State water commissioner goes up there, and says, "Now, here, you turn this water down the river." He says, "I won't do it; this is under the jurisdiction of Uncle Sam." I could suggest just a few hundred complications of that kind. Do you think that is a good thing? I have been at work all my life down below trying to build something, trying to build a home. Then the General Government arbitrarily takes away my water right. I am helpless; I have no recourse in the courts, for you must know a citizen can not sue the Government. This very condition is one of the very strongest reasons why the Government should not go into business, because the individual can not enforce contracts in the courts, while the Government can.

We are supposed to be a sovereign State, with jurisdiction over all of the territory of the State. Are you going to divide up that jurisdiction? Are you going to take every place that you happen to own and say that your jurisdiction extends over that because you own it, no matter how you got in charge of it? Why, if that is true, you have got over 40,000,000 acres of land there now, and all you have got to do is to buy the other 22,000,000, according to that theory—less than 22,000,000; 21,000,000 and something—and our State government is at an end. Is that the theory? Why, if one of your forest officers is attacked by some one there, what does he do? He does not go into the Federal courts for protection; he comes to our State courts. Are you going to change that, and if it is at a water-power site, in a forest reserve, or upon a power plant, or upon a reclamation project that some crime was committeed, take it into the Federal court instead of the local court? And if there is a question of who owns the water or what ditch or reservoir has a right to the water in times of scarcity, what are you going to do about it? How are you going to settle that? Are you going to make us readjudicate the water rights from the mouth of the Mississippi to the headwaters in order to determine whether we have our rights correctly related with each other and with others? Is that the theory that you are going on? Where are you going to let up? This is an important question. It is a question of jurisdiction. How are you going to get development of those lands? Is not the price of meat high enough? Don't you want that country settled up so that we will grow meat cheaper than it is? And let me tell you this is going to be the great meat-producing section of this country in a short time. Don't you want to pursue a policy conducive to that end?

How about your development? Can you get a man to take up a piece of raw land and take his chances to develop it under such a scheme as this for controlling the water? You can not get water; you can not get land; you can not get minerals; you can not get anything developed unless you hang up the prize of ownership. That is all there is to it. You have got to guarantee their use or you can not get it.

Now, this question of jurisdiction of water is a very serious thing. You have a bill here to unify the streams of the West that you asked the irrigation conference to indorse last spring. The governors are practically unitel in opposition to that. Why? Because they said it

was contrary to experience with our problems out there; that it would be ruinous; that it would ruin even those who were pushing it. Are you going to unify the Colorado River and destroy the entire western slope of Colorado, which is watered by the tributaries of that stream? Are you going to establish a storage area down in Arizona and California and compel the Colorado water to leave that State before it is used? What becomes of that great possible empire west of the crest of the Rocky Mountains? If we use the water, it still goes down to the States further west, and they get it without cost. We delay the flood waters for a time until the flow of the stream is equalized, and that is all. That is all the harm we do, and you are not using them now, and you could not put them into effect any sooner. Is our way right or is your way right—not your way, but the way of these people—these bureau people? Do you want to kill the goose that lays the golden egg? Take the Platte, for instance. We take that water out of the Platte, and it finds its way back to the river. But go back to the days when the big floods went down in the spring and there was no water in the fall. Do you want to continue a policy that will eventually absolutely equalize the flow of that water or adopt a contrary policy? Which is the better for this country and which for the States concerned? That is the problem.

Now, gentlemen, I came down here to earnestly plead for what we think is right, for what our experience has taught us was right, for the rights of our State, and for what the older States have had. All of you have read the history of the making of our Federal Constitution. Each one of you know that this Nation was founded after a great controversy on this public-land question, on the very principle that these public lands should be disposed of by the Government to establish new States to be admitted on an equal footing with the original States in all respects whatsoever, and for no other purpose. Are you doing that if you take away our taxing power? Can you do it? If you ever establish a leasehold policy, is a lease a disposal of the property? Could you possibly, do you think, maintain the position anywhere in the world that merely leasing them out would be a disposition of these lands? Do you think that is fair to the people who are trying to make a new grainery out there, a new storehouse, a new place to grow and raise the meats for this country? Do you think it is fair to pay a tax upon them? And, then, did you ever stop to think for a moment what that tax was upon after all? If you put a tax upon those waters, have you stopped to think what it means? There are no dollars flowing down those streams out of the Rocky Mountains—not one. They are not there. You lay a tax upon water—I care not how little or how great—and you are taxing what? You are taxing the values that have been stored up there by the labor of the people who have gone in and developed all of that country that has been developed. Is that right? There is no value or was none to the coal until the people went there—not a dollar's worth. It had lain there for untold centuries and was of no value until the prospector made the discovery and spent his time and money to dig it out. Have any of you ever had any experience in mining? If not, have you ever figured out what the net profit of the production of minerals has been in the West? We have had this great golden prize hung up, and we have had thousands and thousands of men who have spent a lifetime hunting for the treasure who have never found

it. On the average, my friends, every dollar of gold that has come out of those mines represents a dollar's worth of human toil. That is what you are going to tax. Or it may be the most valuable farm that there is in the Platte Valley or in the Grand Valley or the Valley of the Arkansas—what does it represent? It simply represents the storehouse of the added toil of those who have made its value by developing the land, putting water on it, and it represents nothing else. Is that what you are going to tax?

Let me tell you, gentlemen, that you will never get this water developed under any such scheme as is proposed here. Let the settler in that country have these lands. In Colorado we are short a quarter of a million people now, because of what the present system has already done. We have resources now, but they are difficult to produce, difficult to use, and expensive to gather to make useful—enough to support tens of millions of people. Why not let us utilize them? It does not hurt you; it does not hurt the East. The stronger our Western States become the stronger the Nation becomes. Why not give us the same chance that you have had? We are not destroying anything, and the man who says we are or have destroyed anything in the past slanders as good a people as live under the sun. We are doing our work right so far as human knowledge goes. We will continue to do so, and no one has any more interest in it than we have. Don't strike at the vitality of those States—don't do that, but help to build them. Lend the same sort of cooperation that is being loaned to teach the new farmers in irrigation farming. Do that and you are doing a worthy service. Do not come in and say, "Oh, the State is no good; you must look to the Federal Government." Do not do that. This great country of ours grew upon the foundation of the States that formed the Union, and upon the equality of those States. Do not destroy that equality. If you take from us half of our territory, or a quarter of it, with the taxing power, you are going to cripple us just that much; and if you put this policy into force with these several bills, you are just taking a little more away from the support of our State and our local institution. Is it fair?

Now, just let me make this final appeal to you gentlemen. Do not be in any hurry to put into effect something that does not accomplish what it purports to accomplish. It does not mean development, because there will be no money for development. Do not think that because Secretary Lane is a fine man we can rely upon the fact that these things will be done right. He can not do it. He has no time, nor will his successor have. The real work must be turned over to somebody. To whom? To other people whose responsibilities are not as great as ours, whose interest is not as great as ours, whomsoever they happen to represent. Just recollect that, gentlemen. Do not strike at the vitality of these States; do not strike at the sovereignty of these States. Help to build them instead. Put a system in vogue that will build and not tear down, that will promote and not retard the development of the States. Lend a helping hand, but do not destroy us. That is what we ask, and that is all we ask. We are here not in a mood to criticize. We have got past that point. We realize there is extreme danger to us. With this Senate and with this committee here to-day rests the responsibility. This committee

itself can say to these States out there, "Go forward," and they will go forward. All they want is the opportunity.

The other day there was a man in my office from Australia. I was asking him about their settlement down there. He said, "We have not settle so much since the war; but until this war broke out, we have settled a thousand families a month in our State alone." They are inducing settlers to go there. They are offering them financial assistance. They are giving them their homes, and are helping them to even plow some of the land, furnishing live stock and putting water on their ground, and getting it ready to cultivate. Why do we not adopt a policy like that? Millions of acres in our State are lying idle. Our farmers have left our State and have gone to Canada because they treat them better up there. Are we not on the wrong track? We want these lands opened up so that the settler and the home builder can come and get them. That is all we want. That is all we ask to-day.

Because the passage of any of these bills will form the entering wedge of the leasehold system, because their underlying principle is unpatriotic tenantry, instead of home-owning devotion to country, all of them should meet with certain defeat.

These measures are not intended to, nor can they, accomplish what they promise, except at unpardonable cost of public money and dissatisfaction of our people.

The leasehold principle strikes a vital blow at home-loving, home-owning patriotism, and inspires a reckless indifference in place of ardent devotion to our institutions. It weakens our local and State governments by withholding the taxing power. It provokes dissention by creating a double jurisdiction, and aggravates the situation by denying the citizens and local authorities the right to protect themselves in the courts. It places our people and their business at the mercy of the whims and prejudices of men, instead of giving them a government of law. It rejects the policy of local self-government, discourages pride to excel in our local institutions, refuses the best reward to individual effort. It produces an unnecessary, growing, lasting resentment against the vicious bureaucracy, which, like a cancerous growth, is constantly gnawing at the vitality of our republican form of government.

Born of a narrow selfishness and lust of power unworthy of any great governmental agency, it will not accomplish the purpose desired, but will weaken the very fabric of the Union. Let our western men with unfaltering courage neither accept nor compromise with it, but, conscious of the rights of their people and the good of the country at large, stand with resistless force against its every encroachment.

I thank you.

STATEMENT OF HON. GEORGE A. CARLSON, GOVERNOR-ELECT OF THE STATE OF COLORADO.

Gov. CARLSON. Gentlemen, Gov. Ammons covered the question very thoroughly. There are just a few things that I wish to emphasize, even undergoing the danger, somewhat, of repetition.

Now, in the first place, I wish to call attention to the fact that in the arid West whatever is developed is developed under, perhaps,

more difficult conditions than in the East. Take, for instance, the question of farming, and compare Colorado with Iowa. In Iowa they broke the soil. In Colorado it is a struggle for a number of years.

You take our proposition of minerals, and we have the same condition. One of the resources that naturally belong to Colorado is the water power. This is now in the very infancy of development. It is our opinion that it is necessary that there be private ownership in order to obtain investment. I say that, gentlemen, because of some six or seven years of experience, particularly with the mining industry. You have permitted them. You have permitted the prospector in the mining industry to go ahead under certain permits of the Forestry Service. During the last six years we have had no development of the mining industry. It has fallen off. And why? Because the prospector has been subjected to certain rules and regulations that the ordinary prospector could not comply with. The prospector, the man who actually is the pioneer, the man who fights it in the first instance, is a poor man. He can not plead his case. He has been in the business for some 20 or 30 years. He has crossed the mountains, and he knows in some way that there is pay rock at a certain place. He comes in contact with a certain representative of the Forest Service and that representative disagrees with him. He wants to begin his prospecting, and there is a different report. Consequently he is unable to go ahead. That has been the effect. I am not talking about a theory; I am talking, gentlemen, about facts.

Now, we are now at the very infancy of this proposition. Who is going to regulate it? In whose discretion are you going to place it? You can avoid monopoly in the way that has already been suggested—by penalty. You can fix rates by local utilities commissions. But in case you have certain regulations fixed within the discretion of an executive department of the National Government, what is going to limit that discretion? Where will the department obtain its opinion except from the representative upon the ground How much knowledge does he have? What is his competency? Is he familiar with the whole situation? Has he the knowledge of the pioneer?

I will give you one illustration, for instance: Everything we have developed out there has been developed by men who started upon things that everyone who was educated seemed to be sure was no good. For instance, it has proved that where the Geological Survey agreed was the proper place, from their investigations, to find the mineral in Cripple Creek there was none found. I remember, for instance, in the Poudre Valley we had this situation: An acquaintance of mine built a certain ditch. Everyone was convinced that there was no water for that ditch. He figured it out in a way that ordinary people do not know. What happened in regard to this? You have your departmental representatives there, and he is usually not the big empire builder; he is not the man that will bring about development. He can not carry out that which is impossible. He works along certain lines.

Here we are at the very inception of this enterprise. Your department must necessarily have certain charges for administration. It is expensive. It does not work. It has not worked. It has not

brought about development. Now, that, gentlemen, is the point to which we wish to call your attention.

We say here that the proposition of control, the proposition of the preventing of a monopoly, is something that you can not control by a Federal law. You do not need to destroy ownership in order to prevent monopoly. You can prevent it and give private ownership.

Now, then, in regard to the regulation of rates; that is a matter that should be controlled by the State as long as it is a State industry. Then, what is the result? You place it within the jurisdiction of the States. It is taxed by the State; it is controlled by the State. You secure private investment because there is a proper rate and ownership. And you secure them because they are controlled by the State laws and are not subject to departmental regulations. It may be that you can get development in the future in our State. But you have not got it in the past, and we do not believe that you can in the future. You are working 2,000 miles away. You are working with expensive machinery. This is unnecessary, and it would get away from the proposition of individualism. Why, gentlemen, you do not want a Government of bureaucracy. You do not want that kind of a Government. That is not the way to develop a country. You never would secure the development of any industries upon that sort of a proposition. It is not the way that you developed the East, and it is not the way that you are going to develop the West.

Upon that proposition, gentlemen, you must have private ownership in order to get development. You can not get it in any other way.

I do not wish to take up further time upon this proposition, except simply to go back to the few salient propositions: First, that we should have the right to tax this property. We have only 32 per cent of the land under taxes, and there is 68 per cent of it not under taxation. You can not make any regulations of taxes. You may go into the fine discriminations and the discussions on that proposition, gentlemen, but if you lease this property the State can not tax it, and we can not get any results. In the first instance, we start now with an industry that is in its infancy. The way we have developed things in the past is through private ownership, and, gentlemen, we have not been able to develop in any other way. You do not develop individualism in that way. You will not get people to invest in that kind of a development. You have not been able to do it before.

The mining industry of Colorado has been cut off. It has not gone forward. This is not any theory, mind you, gentlemen. Mining has decreased. It is because of departmental regulations. You can not escape it, and you will meet the same proposition if this law is enacted.

Why do you want to assume this burden? Why do you want to administer those things out in Colorado? It does not seem to me it is in line with our idea of the autonomy of States and the rights of individuals in the different States. It seems to me to be a usurpation of a function that is not properly one that belongs to the Federal Government, and an assumption of responsibility and expense that the Federal Government should not assume.

Now, gentlemen, with all the safeguards that you can place around to prevent monopoly, and with the necessity of private ownership,

and with our necessities ahead of us, it seems to me that this proposition of leasing the power sites, as proposed in this bill, is contrary to sound judgment and justice. We are opposed to it and opposed to it upon principle.

Gov. AMMONS. I would just like to say one thing to illustrate what Gov. Carlson has said about the way we found our minerals in Colorado.

When first discovered, Cripple Creek was pronounced by the authorities a very shallow camp. If you care to see them, I have, and can bring here and show you, some extremely rich specimens showing a discovery made in one of the Cripple Creek mines at from 1,700 to 1,900 feet deep, out of which the Colorado State mining commissioner told me the day before I left that many tons could be shipped. There is enough of that high-grade ore in one pocket to make rich all the owners of the mine, and the indications are for continued improvement with greater depth. Then I have a little specimen here that has over 4 ounces of gold in it that came from near Breckenridge, Colo., where the scientists thought it absurd that anything should be found. So you see we are working out our own salvation in the minerals as in everything else in Colorado. We have worked out our salvation in the minerals and we can work out our salvation in handling the water if you will allow us. At the same time that we benefit the State we also will benefit the Nation as a whole. Why not give us a chance? If you would like to see these specimens I would be very glad to show them to you to demonstrate how utterly wrong those who are supposed to be the most wise can sometimes be.

STATEMENT OF MR. FRANCIS T. HOMER, MEMBER OF THE BANKING FIRM OF BERTRON GRISCOM & CO., 40 WALL STREET, NEW YORK.

Mr. HOMER. Mr. Chairman and gentlemen of the committee, most of the things I would like to say with reference to this bill have been covered by Mr. Powelson, whose evidence I read this morning, and that will very materially reduce what I feel there is any occasion for me to say to the committee. I am not going to discuss therefore, unless some member of the committee should wish to ask particular questions, anything except three points in connection with the bill. One is the distinction made or attempted to be made by the bill between developments that are made by municipalities and developments which are made by corporate private enterprise. The second is the recapture provision. The third will be the capitalization provisions, etc.

With reference to the question of the distinction drawn in this bill, or attempted to be drawn between municipal developments and corporate developments, actually there is no justification in fact or in principle for drawing that distinction. There is no justification for any development of hydroelectric power, whether it be water or steam, except insofar as it is to serve consumers, to serve the public; and it makes no difference to that consumer whether that service is rendered to him by the community of which he happens to be a resident and a citizen, or whether it is furnished to him by a corporate entity which is acting as the agency of the State or the mu-

nicipality in furnishing that service. What he does want and what he wants to be sure that he is going to get is adequate service at a reasonable and fair rate. Whichever way he can get it the best as to quality and the best as to price is the way that he is interested in receiving it.

I apprehend, that on mature thought, the members of this committee will also feel that they are best serving the public interest if they encourage development by adopting that policy in the bill which will result in furnishing that best quality of service at the lowest possible cost; therefore, if that be true, there ought not to be drawn any distinction in favor of development by a municipality, as such, as distinguished from development by private capital invested in corporate form, performing the public agency of rendering this service. This distinction would have this rather disastrous effect upon private capital going into these public-service corporations; and that is that, wherever, in one's sphere of influence, or a sphere that can be reached by several developments, private capital is expected to go in and submit to a rental or charge as provided by this bill, it will go in there subject to the recognized risk that, if it builds up a community by reason of its enterprise, by developing their manufactures; by developing their mining operations; if as a result of that it builds up the community, when it has accomplished the building of that community, some other power-site development within reach of that community could be applied for by the community and could be developed as a water-power development, and a source of energy and then, that that energy, free of any charge or rental charge in favor of the Federal Government, would come in competition with the corporate development which was subject to a rent charge and a tax.

So that the very investment on the part of the corporation of its funds in the building up of the community would establish a menace to the continued prosperity and success of that enterprise. I do not think that is wise, and I simply want to endeavor to bring that point to your attention.

The next point to which I wish to direct your attention specifically is the fifth section of the bill, which is called the "recapture clause." It should not be called the "recapture clause," because it not only involves a recapture but it involves a great deal more than a recapture, in fact, as it is provided in the bill now. If, for example, the Pacific Gas & Electric Co. were to accept 20 acres of land that they needed for reservoir development, about which Mr. Britton spoke, it would obtain it solely upon the condition that lands which it bought 30 years ago would at the expiration of that lease be subject not to recapture, but subject to original taking; and original taking at what price? Not even at the price value of the lands, but at the price at which that land may have been acquired 30 years ago.

What this recapture clause should provide is the following:

First, that no lands or rights granted by the Government should be charged with one single dollar upon their recapture. In other words, every foot of public land that is given, whether it is given subject to a rental charge or without a rental charge, should be taken back without any allowance of compensation for that which it is granted, because it is granted for a period of 50 years, and thereafter until the power of recapture is exercised, there is not a single

intangible right which may annex to that lease or rights that may be attacked that should be valued at the time of recapture; but those things which the enterprise brings itself, which are of value to the enterprise when they are taken back, should be taken back at their fair value. What I mean by that is this: A concrete dam across one of these rivers may be laid in reinforced concrete costing $500,000; it will represent in addition to the $500,000 probably $50,000 for preliminary investigations as to which is the particular proper point on that river to build the dam; it will involve in addition to that a considerable number of thousands of dollars invested in sinking drill holes or pits in order to ascertain that you do not have, as they had in the Tennessee River development, a quicksand, or something of that sort, which would add $1,000,000 or $2,000,000 to your cost; it will involve an actual cost for engineering supervision which can not be foreseen.

And after it becomes a going concern it will represent an actual dollars-and-cents investment on the part of the promoters of the enterprise, for fixed charges and taxes on that investment, and the return on the money in that investment from the period that the enterprise was initiated until a sufficient quantity of its output is found and marketed to pay a reasonable return not only on what the physical assets cost but what the building up of the business cost.

Personally, as president of a southern gas and electric corporation, I have been interested in the development of four public-service corporations in four small southern towns, and I have had an exact check kept to ascertain how much it cost us, in addition to the building of the plant, complete, to acquire a business that would make those companies self-supporting so far as to see that operating expenses should not any longer exceed operating revenues, not counting a dollar of return on the invested capital, and I found that, approximately, in order to make the gross revenues equal the operating expenses of those companies, the cost has averaged 23 per cent. It will probably average 18 to 20 per cent more of investment before we get to the point where we will get the legal rate of interest on the investment in those public-service enterprises.

Therefore, in that fifth section of the bill, where it refers to the "other intangible elements," they are going to take away from the people who invest in this enterprise:

First, their present value of real estate increase over what it may have cost them at the time they accept the lease.

Second. They are going to take away from them the actual cost that they put into the enterprise in order to build up its business.

Third. They are going to say this, with reference to the actual, tangible, physical investment: We are going to depreciate that, so as to ascertain, as of the termination of the lease, what its then fair value is, and that is the sole allowance which is going to be made.

Senator Clark and Senator Norris both asked Mr. Merrill a rather pertinent question, in the light in which the matter was then presented, and that was this: Why should the Government pay for anything more than its value at the time at which it is taken over? As a bald proposition, nobody should every be asked to pay more than the fair value of anything which is acquired.

But the fact is this, that if you are not going to allow these enterprises the benefit of any of the increasing values among their assets,

but you are going to deprive them, by charging them with all the depreciated values, how can you get capital invested? There is not an opportunity in this line of business for a man to make excessive profits; he may have done it in the past, owing to the absence of regulation, but all of these public-service corporations are now regulated by commissions who are not selected by the corporations but by the people who pay for the service, and actually the people who pay for the service therefore select the judges and juries who determine what will be a fair rate of return.

And that mere fact has created, on the one side, an initial difficulty in acquiring capital for public-utility investments at all; but on the other side, by reason of the general fairness of commission rulings, has now rather increased the stability of investments and public utilities.

I do not think that by adopting a rule of recapture which is at variance with what has been recognized by the best public-service commissions the Federal administration will be adopting a policy conducive to capital investment.

The third point to which I want to direct your attention is merely the question of capitalization regulation.

The experience in States having public service commissions with this matter of capitalization has been rather a disastrous one to corporations, from one point of view, and that is the inevitable delay which is attached to securing action by public-utility commissions in respect of security issues.

If you can regulate the security issues and do it expeditiously and promptly, so that a public utility water-power company can get the benefit of a market for the sale of its securities when it is at its best, we should have no serious objection to regulation.

But rather than subject ourselves, in making investments in this character of enterprises, to the delays which are inevitable in connection with the investigations which the commissions make, we would prefer to have written right into the bill that the issues of securities which may be made in respect of these enterprises shall not constitute a basis in rate regulation or a basis for consideration at the time of taking over the property, whether by condemnation or otherwise.

And in that connection, to go back to the first point which I made very briefly, I want to say that there is another advantage to the communities to be served by these water powers by putting the corporate enterprise, in so far as charges or rentals only are concerned, on exactly the same basis as you put municipal enterprises, and that is this, that whatever such a water-power corporation may obtain by grant from the Federal Government is always subject to the terms of that grant, capable of being taken by a municipality in condemnation proceedings.

STATEMENT OF MR. G. M. DAHL, OF NEW YORK, N. Y.

Mr. DAHL. Mr. Chairman and gentlemen, I am vice president of Electric Bond & Share Co. of New York City, which company is engaged in the business of financing electric light and power companies and other public utilities.

I do not desire to take up time in discussing any of the details of this bill. There are, however, one or two most important factors in

legislation of this character—one or two fundamental factors, one or two things which must be taken care of if there is to be any development following this legislation—to which I should like to direct your attention.

There are a number of things which are incidental, a number of questions as to which there might be a reasonable difference of opinion; but there are two essential matters in my judgment as to which nobody who understands the problems can disagree.

The first of those propositions is that in order to obtain any development whatsoever under this legislation the tenure must be satisfactory. That, I understand, has been disposed of by the concession of the Secretary of the Interior, as announced by the chairman the other day—that it was understood that the tenure would be for 50 years and would continue thereafter until the property had been taken over by the Federal Government.

I will therefore spend no time on that proposition.

The second proposition is that if the property is to be taken over, at the time it is taken over full compensation must be made to the investor who has put his money into the enterprise. If full compensation is not provided for in this bill, then naturally it can not be expected that anybody will invest in undertakings of this character.

Now, I believe every member of this committee desires to see that full compensation is rendered, and that full compensation is written into the bill. The only difference of opinion there might be is as to the manner of expressing that, the manner of accomplishing that purpose.

The bill as it stands provides for a certain value to be fixed at the expiration of the grant, and in arriving at that value, in the first place, real estate is taken at its actual cost and then the balance of the property of the utility is to be taken over at its reasonable value, excluding certain intangibles and excluding certain other elements.

As to certain exclusions in determining the value of the property to be taken over, I have one or two suggestions to make. For instance, it is provided:

> That such reasonable value shall not include or be affected by the value of the franchise or good will or profits to be earned on pending contracts or any other intangible elements.

If that provision remains in the bill, it will follow that the investor will be deprived of a substantial portion of his investment.

I have no desire to occupy unnecessarily the time of the committee in discussing that proposition, if it is the concensus of opinion of the committee that the entire provision as to intangible element should be stricken out of the bill; but if there are any members of the committee who still believe it should remain in there——

Senator SMOOT. I think you had better discuss it.

Mr. DAHL. All right; then I will discuss it.

The CHAIRMAN. I have heard no member of the committee suggesting striking that out, Mr. Dahl.

Senator NORRIS. On that point there is another proposition there which you have passed over on what you say has been settled because Secretary Lane said so and so.

Mr. DAHL. Yes.

Senator NORRIS. I do not believe you ought to assume that necessarily there would be changes made just because the Secretary has said they ought to be made.

Mr. DAHL. No; I quite agree with that.

Senator NORRIS. While we have great respect, all of us, undoubtedly, for Secretary Lane and his judgment, yet that is not conclusive by any means upon this committee.

Mr. DAHL. I quite appreciate that.

The CHAIRMAN. All that I have said on that subject is that I have understood that Secretary Lane said that such a change would be agreeable to him; and a number of the members of the committee have spoken as though they would favor it. I do not wish to say anything that would settle or foreclose or forestall any action on the part of the committee; it is in the hands of the commitee, of course.

Mr. DAHL. I appreciate that. I simply mentioned that in passing, in order that I might bring out some of the views, and in order that I might not occupy the time of the committee unnecessarily.

The CHAIRMAN. So far as I am concerned, I am in favor of that provision; but I am only one member of the committee.

Mr. DAHL. Then I will come back to that proposition in a moment. At present, I want to discuss intangible values, which are excluded by the language of this bill.

Starting out with the proposition that every member of this committee desires that the investor shall receive the full amount of his investment, assuming the investment to have been made with reasonable economy, care, and efficiency, my proposition is that the exclusion of intangible elements does not return to the investor every dollar that he has put in; and I might put it this way: If an enterprise cost, say, $100,000, and it is the desire to return that $100,000 to the investor at the end of 50 years upon taking over the property, by excluding the intangible elements, you would exclude all the way from 30 to 50 per cent of the $100,000, because there are percentages varying from 30 to 50 per cent, involved in the actual expenditure, actual dollars paid out by the company in making its development, which the investor in that enterprise would not receive.

I recognize the fact also that there has been in the mind of the public, and quite possibly also in the minds of a great many people who may have given some casual study to questions of this character, not exactly a clear and definite notion as to what the term "intangibles" covers. I think that, to people who are not familiar with the public-utility business and who have had no experience in the method of making valuations by public-service commissions for rate-making purposes or in condemnation proceedings or by public-service commissions in taking over properties, it is considered that the term "intangible elements" means something speculative, something which the utility really should not demand, something for which it has not actually paid out money; some gain which it would receive from the public to which it is not entitled.

That is an incorrect conclusion. The term "intangible" has been used by courts and public-service commissions as synonymous, in a great many instances, with the term "overhead charge"; and the term "overhead" has come to mean a great many things for which money has been actually spent, but which can not be seen, can not be touched, and can not be felt.

Senator SMOOT. And for which money has been necessarily spent?

Mr. DAHL. Yes; necessarily spent; absolutely necessary; just as necessarily expended as that expended for poles, and for wires, and dams, and power houses, and dynamos; and I shall be glad to give you a few illustrations of that:

To begin with, before an enterprise is inaugurated there are a number of preliminary expenses which have been recognized by courts and public-service commissions from the beginning, as elements of value and elements for which the utility must be compensated. There are preliminary expenses, such as organization, administration, legal, and financial. When an enterprise is about to be inaugurated it must be investigated, engineers must be sent to the grounds, surveys must be made, titles must be examined, lawyers must be employed, executive organizations must spend their time and their brains and their money in the enterprise, and those are all things which actually go into the cost of the enterprise, just exactly as much as the cement or the brick or the steel.

Another element is promotion cost, such as reports, engineering service, interesting of bankers and local authorities. I recognize the fact that there is probably a feeling among a great many people against promotion cost or against remuneration to promoters. I do not think that feeling would exist if people could sit down and agree upon just what they meant by "promotion cost." Now, I do not mean extravagant promotion cost, and I do not mean vast speculative profits, to be returned to the people who initiate the enterprise. I mean something which the company has actually spent and paid to the men who have inaugurated the enterprise; the men who have found it; men who have gone out after they have found it, and taken their time and taken the chance of spending their own time and money in order to interest other people in the enterprise; and if it were not for that sort of thing many large projects, some of which have already been constructed in the West, and others of which people hope will be constructed in the West, would never be initiated, because they do not create themselves; they do not rise out of the ground soliciting money to be invested; men must go into them; men must take the chances; men must have the courage and the foresight and the daring, after they have found these enterprises, to devote a great many years of their lives to them, and devote their time and their energy; and for all that they must be compensated.

Now, that has been allowed by the public-service commissions in a great many of the United States; it has been allowed by courts. I would like to quote some language from the Hadley Securities Commission on the question of promotion costs, because the Hadley Securities Commission was composed of men who stand high in this country, men who can not be said to approach a question of this kind from any viewpoint except that of the public interest.

As you know, that commission was composed of Arthur T. Hadley, Frederick Strauss, B. H. Meyer, Walter L. Fisher, and Frederick N. Judson.

That commission made a report to President Taft, and on the question of promoters' profits, on page 30 of that report, the commission used the following language:

We are told that the profit of the promoter represents a wholly unnecessary burden upon the American public, and that so far as this profit can be done

away with it will be good for all parties. Neither of these statements is quite true. The promoters, using the term in a broad sense, may be divided into two classes—constructors, who build a road whose future is uncertain, in the expectation of selling the stock for more than it cost them; and financiers, who induce the public to buy the bonds of such roads. Both of these classes, if they do their work honestly, render useful service to the public. The constructor gives our undeveloped districts the benefit of new roads, which they would not get without his intervention; and if he does his business well he builds the roads more economically than anybody else could. The financier renders an equally important service in collecting the capital of the investors to build new railroads or improve old ones. On the Continent of Europe this is done by the banks. The great banking concerns of Germany use a very considerable part of their deposits in carrying industrial enterprises during their initial stages before their merits have been demonstrated, and then disposing of them to the actual investor at a profit in order to set their capital free for the floating of new concerns. But in the United States the power of the banks to do this is limited by law and by custom; and so far as they either can not or do not, it must be done by financial houses especially organized for the purpose.

Our American system undoubtedly involves grave possibilities of fraud. The man who is constructing a road is tempted to persuade people to loan him money on inadequate security. The financiers may be tempted to wink at this deception. Worst of all, the roads thus built may be built for sale at an inflated valuation. The promoter may obtain his profit, not from the legitimate increase of the value of his property but from his power to persuade the management of some larger system to buy the branch road for more than it is really worth. These are evils which publicity would do much to check. Where there is no fraud the promoter renders a service for which he is entitled to fair remuneration.

Now, I am going to ask permission, when I complete my remarks upon this branch of the question, to file with the committee a brief citing a number of authorities and quoting from a number of decisions on these various matters; and in that brief will be found some further quotations on the subject of promoter's remuneration, and a reference to some cases, particularly a California case, where the California public service commission, in passing upon the value of property, included promoters' remuneration, and allowed the issuance of securities based upon the promoters' remuneration.

The CHAIRMAN. If there is no objection that may be done.

Mr. DAHL. Another element preliminary to construction is commission to brokers and underwriters, cost of preparing and marketing securities, and the cost of getting money. Now, the cost of getting money, and the fees of lawyers, of course are intangible elements. There can not be any question about that; and they may not always appeal to some people; they may not understand what is meant by "brokers' commission"; and they may not understand why the utility should be reimbursed for them.

But let me put it this way: Assuming that you are going to raise $1,000,000 for an enterprise; you have to have $1,000,000 in cash. Now, assuming that there is not any bond issue of any kind, but you are going to raise it all by selling stock; you can not raise $1,000,000 on an issue of stock by simply sitting in your office; you can not sell your stock at less than par under most of the State laws. And assume that you get par for the stock. Now, if you are going to sell it yourself, you have to go out and advertise it; or you have to employ people to go out and sell it. You either have to do that or turn it over to somebody else and pay them for selling the stock for you. If you are going to raise this $1,000,000, assume that it is going to cost you $200,000, if you do it yourself, or it is going to cost you $200,000 to hire somebody else to do it. In either event you are only

going to get $800,000 net for your stock, and that $800,000 is going into your property. But you need $1,000,000. So, in order to raise the extra $200,000 you have to go out and issue $250,000 more of stock; so that you will have $1,250,000 of stock issued, with only $1,000,000 in cash, which you required for the enterprise.

Now, that $1,250,000 of stock is just as much a proper liability of the company as anything else, and you have actually expended your full $1,000,000, and you have sold $1,250,000 worth of stock. You are entitled to compensation for it, although you have only put $1,000,000 into the property from that issue of stock. And on this basis of valuation of physical property, excluding intangibles, you would only get your $1,000,000 and not the $1,250,000. After you have finished your construction——

Senator NORRIS. I should like to ask you a question at this point. Is it not a custom with all those corporations, and is it not a very proper custom that, after they are started, these intangible expenses that you have been talking about, are returned in the way of dividends—assuming that the property was sufficiently profitable so that that could be done?

Mr. DAHL. I do not think that is the custom; I think that in the past there have been a great many different methods of operating, financing, and developing utilities, and getting earnings——

Senator NORRIS (interposing). Well, I am satisfied that it is often done; and, of course, there are a good many cases where it is not done. But let us take a case where that has been done; let us assume that for the sake of the argument. Then, in taking the property over, it would be proper to exclude those things, would it not?

Mr. DAHL. It seems to me that you indulge in this fallacy: Your proposition applies no more to these intangibles than it does to the physical property. The logical extension of your proposition is this, that if the original investment was $1,000,000, and the utility has received a fair return from the beginning, and plus that fair return has received and distributed in dividends the full principal, namely, $1,000,000, then there is nothing more to be paid for.

Senator NORRIS. No; I would not go that far; and my question does not imply that, in my judgment. In the case you put, you have $1,000,000 worth of property and $1,250,000 worth of stock outstanding?

Mr. DAHL. Yes.

Senator NORRIS. Now, suppose that corporation operated for 10 years, and during that 10 years it paid a dividend, let us say, of 10 per cent on $1,250,000, and in addition to that dividend enough extra dividends to make up the $250,000; is it not liquidated?

Mr. DAHL. Yes; I quite agree with that.

Senator NORRIS. And in that case it should not be paid for if taken over?

Mr. DAHL. It should not be paid for if taken over, if the corollary of the proposition is true—that if it is not earning a fair return from the beginning, that should be taken into consideration in taking the property over.

Senator NORRIS. Certainly; that is quite true. Now, taking the case cited a few minutes ago by somebody at this hearing—that Nevada case—where a witness said that they had been in operation

seven years and had paid back in dividends the entire capital stock of the company. Suppose the Government takes that over; do you think there should be any allowance in that case for those intangible elements that you are speaking of?

Mr. DAHL. That all depends on the circumstances. At the present time you are legislating for the future. At the present time, so far as we can see, with the present existing regulation and the regulations which are in view, there is no chance to get back any of that money. Public-service commissions to-day, in regulating rates, only allow you a fair return on the actual investment and the actual cost; and they include these intangible elements which I have spoken of. In other words, they do not allow you to have returned the principal on the intangibles, but they give you the interest on the intangibles. They do not allow you the principal on the intangible any more than the principal expended in the physical property; they give you interest on it; and it seems certain that no public-service commission in the future will allow the company to amortize, for that is what your proposition amounts to, is it not?

Senator NORRIS. Yes; amortization.

Mr. DAHL. Amortization; yes. Because, in order to do that, there would be an injustice upon the temporary consumers for the benefit of the consumers who follow later on.

Senator NORRIS. Of course you have to spread it out a good many years, if you did that.

Mr. DAHL. Exactly; that proposition is involved in the decisions of these public-service commissions all the way through. When you spread it out——

Senator NORRIS (interposing). But it seems to me that in the Nevada case, and cases similar to that, there might be cases where that has not been done, and some cases in which it was a doubtful question, about which men might disagree. But where that happened, that in seven years they had returned the entire capital stock, and that would include your intangibles?

Mr. DAHL. Yes.

Senator NORRIS. It seems to me there, if we were going to take their property over, we could very fairly say to the people, "You have no intangible value that we ought to pay for."

Mr. DAHL. That refers to a specific case which you have mentioned. I was not present when it was discussed. But there had been no regulation by a State commission at the time.

Senator NORRIS. Perhaps not; but what difference does that make?

Senator SMOOT. It was a case such as you would not be able to find in all the history of electricity, and it was a case where the electricity was used in the mining camp, and they did not know whether there would be a use for it for one year or two or three years.

Senator NORRIS. That does not make any difference about taking it over, with regard to payment for these intangibles. The question is, Have they been paid once, and if so, shall they be paid twice? And I can give you a great many cases where corporations have paid from 24 to 50 per cent for 10 or 15 years.

And it seems to me in a case like that that if the public were going to take it over, the board who are going to appraise it would take into consideration—and ought to take into consideration—whether or

not the company had already been paid for the expenses of incorporation and the promoters' charges, and all those other necessary expenses which I concede are legitimate expenses if honestly made.

Mr. DAHL. I think you are wrong about that, and I will tell you why. In the first place, under regulation, that could not happen; and the only case where it could happen is where there is no regulation. And the second reason is this: Where you have no regulation, and people go out and invest their money, they have no assurance of any return; they have no protection from competition; they go into the new communities, where the enterprises of that kind are speculative enterprises.

Senator NORRIS. Well, how much——

Mr. DAHL (interposing). Will you please let me continue for one moment. Now, the enterprise being speculative and the public not having elected to exercise its right to regulate—because, bear in mind, the public had a right to regulate there, and they did not do so, and the company made large profits. Now, the effect of your suggestion would be to take those profits away from them, by a process of retroactive legislation.

Senator NORRIS. No; I do not agree with you as to that at all; we are not taking the profits away. Here, we have an illustration right here in the District of Columbia where that is not regulated: The Washington Gas Light Co. paid a dividend of 24 per cent on its capital stock, which was just twice the amount of its actual investment, last year—and I presume they will do the same thing this year.

Senator SMOOT. But take this into consideration: There may be a stckholder, for instance, and circumstances may compel him to sell his stock.

Senator NORRIS. Certainly.

Senator SMOOT. And he may sell his stock to another person, and he has not received anything at all from any advantages in the past.

Senator NORRIS. Well, he is buying at the market price; if he is buying gas stock, the par value was $25, and he sold it at a value of between $90 and $100; and he was not losing very much; he was getting good returns.

Mr. DAHL. Let me give you an illustration of your principle, which was given to me by a man about six months ago:

He said, "The trouble with regulation is that it is not sufficient, because sometimes we ought to have the right to confiscate, and the courts will not let us confiscate." He was a man occupying an important public position, where he came in contact with the public, and had to deal directly with these problems.

And after I asked him, "What do you mean by that?" He said, "These people have had large profits; and you regulate them on their fair value, when you can not get those profits back."

I replied to him: "I suspect that you means this: If $1,000,000 was invested in an enterprise and the public did not regulate it, and the company got a fair return, and over and above a fair return, so that they distributed the entire principal to their stockholders in dividends, they had had their $1,000,000 back."

Now, they sell their stock to Bill Smith, for example, and then the commission comes along to regulate the rates. Bill Smith has not had the money; and yet on your proposition, you would charge

Bill Smith, the present stockholder, with the profits that the other people had received. Now, it was not the other people's fault. They were human beings, engaged in commercial enterprises, subject to regulation by the public, which had neglected to avail itself of its right of regulation.

Senator NORRIS. Well, how are you hurting Bill Smith in the case you are supposing?

Mr. DAHL. Well, Bill Smith would get nothing.

Senator NORRIS. Oh, no; nobody has advocated that; and my question does not involve that; but my question does involve this particular part of it: You want to get from Bill Smith an intangible value that, under the circumstance you have related, I do not believe he is entitled to, if the public want to take the property over.

Mr. DAHL. May I ask you this question: Why do you separate the intangibles from the tangibles?

Senator NORRIS. Because you have been doing it; I am taking your own illustration.

Mr. DAHL. Oh, no.

Senator NORRIS. Yes; you were talking about $250,000 of intangible property in the particular case you cited.

Mr. DAHL. Yes; but in the——

Senator NORRIS (interposing). You are trying to show, as I understand it, that for the purpose of valuing the property for the purpose of taking it over we should pay for this intangible element as well as for the tangible property.

Mr. DAHL. Yes.

Senator NORRIS. Now, my contention is that if this intangible has been paid in the shape of dividends before, we should not pay it again when the public takes it over.

Mr. DAHL. I will ask you why should you not apply that same principle to the tangibles?

Senator NORRIS. It does not make any difference. The tangible property is there; but the intangible property is not there; that is something that is not there at all.

Senator SMOOT. Well, Senator Norris, suppose you were going to promote an enterprise, and that you had spent of your own money $100,000 in order to do it, and that it cost you or somebody that you had employed $50,000 more to sell the stock of the enterprise in order to make it a success; would you want to give your $100,000 to the stockholders who subsequently came into the company upon the same basis as you yourself enjoyed?

Senator NORRIS. I did not quite understand that question.

Senator SMOOT. Would you want to allow a stockholder who would purchase the stock to come into the company upon the same basis as you yourself, you having paid $150,000 to get the proposition into a position where it could be developed?

Senator NORRIS. Well, I would sell my stock, if I sold it, for all I could get for it; it might be a profit or a loss; that would depend entirely upon what the business of the enterprise had amounted to. But in the case you put, if I had $100,000 worth of property and I had spent $50,000—which, on the face of it, looks like an exorbitant proposition——

Senator SMOOT (interposing). That was not my proposition.

Senator NORRIS (continuing). To get the thing going on its feet. And suppose I ran along for 10 years, and I got, we will say, 25 per cent besides my $50,000 of principal back, and then the public wanted to take the property over. They would be under no obligation to pay me the $50,000. Now, that is my proposition.

Senator SMOOT. That is just as much a cost of establishing the business as the cost of the property itself.

Senator NORRIS. Certainly; I do not object to that; assuming that it has been honestly and reasonably necessarily made; I think that is a proper item of charge; but I do not want the man to get that twice; once is enough.

Mr. DAHL. If you will pardon me, Mr. Chairman, I think the Senator indulges in this fallacy: When you apply that principle why do you not apply it to tangibles as well as intangibles?

Senator NORRIS. The tangibles are turned over in the shape of property to the Government.

Mr. DAHL. Yes; but these expenses are just exactly as much a part of the cost of that property as the property itself. You can see that!

Senator NORRIS. Yes; but I say you ought to be paid that once, but not twice; that is the only difference.

Mr. DAHL. I quite agree with that, if you will limit it to a case where a public-service commission has regulated your rates and has permitted you to earn it and amortize it.

Senator NORRIS. I do not limit it to the case where a public-service commission has regulated it; in any case, if you have got it you have got it. But if the public-service commission has not permitted you to have it back, then if the public takes it over I think they ought to pay for it.

Mr. DAHL. Yes; I think as a practical proposition the suggestion that Senator Norris makes will not affect the matter, because from now on any power company or any company engaged in the public-utility business knows that it is subject to regulation at any moment; and the farsighted public-utility companies are not only living up to the regulations of the public-service commissions now existing, but where they are not regulated they are acting just as though they were regulated, because they know that may happen to them any minute.

Senator NORRIS. If I was on a public-utilities commission and I was permitting you to fix rates, that is one of the things that I would take into consideration; and I would feel that I ought to permit you to charge such rate as would, within a reasonable number of years, depending upon the size of the corporation and the volume of business, return to you a reasonable dividend on those expenditures. Those particular expenditures that you term "intangible," if I was convinced they were honest, I would consider it my duty to permit you to get them back.

Mr. DAHL. Truly. But what would you do in this case: Suppose you had a company that had been operating for a great many years and had an investment of $50,000,000 or $60,000,000 and had had no regulation and had earned large dividends and distributed them; and the time came when they wanted a grant from the Federal Government to occupy a portion of the public domain, and the Gov-

ernment applied this principle, not only to their future but to their past operations? Do you apprehend that that would encourage people to go into this sort of enterprise?

Senator NORRIS. Well, on the principle of what is right, if they had in the past made a profit that was so large that they had been paid for these intangible things that are necessary out of the business and had once received the money, I would not allow them to get it again if I could prevent it.

Mr. DAHL. Would you rather have the waters run to waste?

Senator NORRIS. No; I would not rather have the waters run to waste; but I would say to the man who had the money and wanted to get a permit from the Government, if I was the official in charge, "I want to fix the terms of the permit," and if the terms proposed did not seem to me to be fair I would not permit him to develop the power just because he happened to have the money. If I had control of the power site I would not permit him to exact of me what I did not believe was right, even though the waters did run to waste through all eternity.

Mr. DAHL. And do you think it would be proper to apply that principle to what has happened in the past, when the stockholders of the company had changed and the present stockholders would be the ones that would suffer?

Senator NORRIS. Yes; under this bill now there will be no past; he will lease a new development; this bill provides the thing that would be developed under the lease. Now, at the end of 50 years we would determine whether they had received pay for this intangible value or whether they had not. If they had received pay for it, then the Government ought not to pay them over again if it took the property over.

Mr. DAHL. Take the case of the Pacific Gas & Electric Co.; under this bill it would be a new development——

Senator NORRIS (interposing). It would.

Mr. DAHL. And suppose they have 45 acres on Lake Spaulding for a reservoir site and have millions of dollars invested in private lands. The terms of this bill extend to all the properties of the Pacific Gas & Electric Co. and, under your theory, extends to the business of the Pacific Gas & Electric Co. from its inception; and you go back and trace what you call extraordinary profits—and remember that there may be profits which seem extraordinary in these days which were not extraordinary in view of the conditions existing at the time they went into the business.

Senator NORRIS. Well, the Pacific Gas & Electric Co.——

Mr. DAHL (interposing). I am just using that for an illustration.

Senator NORRIS. Yes; if they went into the business when this law was passed and developed power under it, would, under that particular lease that they obtained, spend, perhaps, some money in an intangible way, such as you have mentioned. Now, I would permit them during the 50 years, if I had the determination of the question, to get that back.

Mr. DAHL. I see.

Senator NORRIS. If they had received it back at the end of 50 years, and I had control of it then, representing the Government, and the Government was going to take it over, I would not permit them to get pay for it again.

Mr. DAHL. That is all right, but——

Senator SMOOT (interposing). But the Railroad Commission of California does not take that view; the railroad commission simply says that the physical value of the property is so much, and you are allowed to make so much in the way of interest on that, and no more.

Mr. DAHL. Yes; that is why I said they will not get it back in the future.

Senator NORRIS. If the State of California should take the property over they ought to pay a fair value for it and also a fair amount for the intangible expense, assuming that they were honestly and fairly made.

Senator SMOOT. Under this bill the Government would not be authorized and could not pay for these intangibles?

Mr. DAHL. That is quite true; and the Government would not take over simply that particular development; the Government would take over all the properties of the Pacific Gas & Electric Co. in the illustration given.

Senator NORRIS. Well, that question has been asked several times, whether it would or would not and whether the bill ought to be changed in that respect to require the Government to take everything over or only the property granted under this bill.

Mr. DAHL. I am discussing this bill as it stands, because the Government under that provision would take over all of the property.

Senator NORRIS. I do not know whether it would or not.

Senator SMOOT. The bill so provides.

Senator NORRIS. The bill does not so specifically provide that the Government shall take over the properties that the company owns now, where it may just connect up the plant by poles and wires, under this bill.

Mr. DAHL. The bill says, in section 5:

> The United States shall have the right to take over the properties which are dependent in whole or in part for their usefulness on the continuance of the lease herein provided for.

Senator STERLING. There is more which follows which you have just read which has a bearing on that.

Mr. DAHL. "And which may have been acquired by any lessee acting under the provisions of this act, upon condition that it shall pay before taking possession the actual costs," and so on.

Senator NORRIS. I suggest that that does not mean anything at all like what you have suggested; I think you are in error.

Senator STERLING. Read the last part of that sentence, please, Mr. Dahl.

Mr. DAHL (reading):

> First, the actual costs of rights of way, water rights, lands, and interest therein purchased and used in the generation and distribution of electrical energy under the lease; and, second, the reasonable value of all other properties taken over, including structures and fixtures acquired, erected, or placed upon the lands and included in the generation or distribution plant and which are dependent as hereinabove set forth.

Senator NORRIS. Reading that last part in connection with the first part of the section, you must admit that your construction is not correct, although I can see that there may be some doubt as to just what it means.

Senator SMOOT. I can not read it in any other way.

Senator NORRIS. I can not accept your view of it.

Mr. DAHL. Well, I would like to get your view on this question: If that is what it does mean—that it does apply to all the properties of the Pacific Gas & Electric Co.—is it your view that in applying this rule of intangibles, if the Government took it over in 50 years, the Pacific Gas & Electric Co. would be deprived of the intangibles involved in its present properties if prior to this time they had received large dividends sufficient to amortize those intangibles?

Senator NORRIS. Yes; I would favor that, although I do not think that is what it means. Even if it did, I would favor that provision, because, taking that particular company of which you are speaking, it is connected up with something which they are operating now simply by wires, and so on; and the fact that it is dependent on it is contradicted absolutely by the very fact that the company has been in existence and doing business before this law is passed and can continue to do that if you cut the wires by which it is connected with the power which would be developed under this bill. Anything that is connected up with the development which the Government would permit under this bill and be dependent upon it the Government would have to take over; it would be under no obligation to take over anything else.

Mr. DAHL. I do not think you understand the means of connection. The method by which every generating plant is tied up with every other generating plant in the system, and the method in which this reservoir, for example, is utilized by all the other plants in the system, and everything in the system generally, when that plant is constructed, becomes so tied up and connected together that it is all interdependent——

Senator NORRIS (interposing). But if it is connected up with some transmission line that they now have, it would not follow that that line they now have was dependent upon the one to be constructed under this bill, because that line is now supplied from some other source. That is a practical demonstration of the fact that it is not dependent on what might be granted under this bill.

Mr. DAHL. Well, you appreciate this, that if you were advising a power company what to do under this law, you would construe this act most strongly against the power company, would you not?

Senator NORRIS. That would be a safe way, I should think, to construe it.

Mr. DAHL. That would be the only way to construe it, because you are providing for something that will take place 50 years from now, and the company could not take any chance on that; and it could not afford to give the Government an option on the theory you suggest, that these intangibles are to be excluded from the operation of the bill; it could not afford to take that chance.

Senator NORRIS. I do not think there would be any obligation for it to do that as the bill now stands.

Senator SMOOT. If the interpretation that you suggest, Senator Norris, is correct, I do not see why the last proviso of section 5 of the bill should be in there at all. It says:

Provided, That such reasonable value shall not include or be affected by the value of the franchise or good will or profits to be earned on pending contracts or any other intangible element.

Senator NORRIS. Now, you gentlemen have been putting me on the witness stand; let me put you on the witness stand for a moment and ask you this question: Do you believe that that ought to be included in the value that the Government ought to pay, in case it takes over the property, for those things you have just mentioned? Do you think the Government ought to pay for the franchise?

Senator SMOOT. No; I do not think the Government ought to pay for the franchise or for any good will; and there will not be any good will for the reason that the companies will be regulated.

Senator NORRIS. Yes; very likely there will be a good will.

Senator SMOOT. Why?

Senator NORRIS. Well, assume that there would be, would you want the Government to pay for the good will?

Senator SMOOT. Not at all.

Senator NORRIS. Then why are you suggesting that that proviso should be stricken out?

Senator SMOOT. No; I am not suggesting that.

Senator NORRIS. But you suggested that on my theory that ought to be stricken out.

Senator SMOOT. You misunderstood me; I did not say anything about striking it out; I spoke of the proviso in connection with the remainder of the section as showing that, in my mind, the meaning of the section was that, if the Government took the plant over, they would take all of the plant, and all that was dependent upon it, and not the little part that was upon public lands.

Senator NORRIS. Well, the provision which you have just read, in my judgment, has no bearing whatever on how much property shall be taken over by the Government. It simply says that when the Government does take over it shall not pay anything for good will or for the franchise—which I suppose is commonly accepted as being proper, and which nobody expects them to do.

Senator SMOOT. Well, so far as the franchise over the 10 acres of public land is concerned in the case cited, that question may be passed over, because it is not that 10 acres, of course, that is of importance in this connection, but the remainder of the plant which may be on private property.

Senator NORRIS. Well, of course, that franchise may be worth $1,000,000, or it may not be worth anything; but whatever it is, the Government should not pay for it.

Senator SMOOT. Of course, it should not pay for it.

Senator NORRIS. It has a value that is sometimes real although intangible, and in transfers of a business between one private person and another it is sometimes the most important consideration in the transfer; for example, when a merchant sells his business, or when a laywer sells his practice, the good will is often worth a good deal. But the public creates the good will in this case, and the public also gives the franchise, and the public ought not to be compelled to pay for it if it is taken over.

Senator SMOOT. In the transfer of a mercantile business there is a good will arising from the fact that it is managed or controlled by the owner of the business himself; his reliability and established trade may make the good will valuable. But there could not be the

same kind of good will in the electricity furnished by an electric company which is controlled by a public-utilities commission; there could be no good will in that sense.

Mr. DAHL. That has been established by the courts—that it has no good will. A monopoly has no good will.

Senator NORRIS. It has been established, in the sense that they do not permit them to capitalize anything of that kind; they do not permit them to capitalize their franchise of their good will or the business being a "going concern."

Mr. DAHL. I do not know that I would put it in that way; it does not come up on a question of capitalization; it comes up on questions of condemnation and rate regulation; and capital has nothing whatever to do with it. It is a question of the investment, the fair value of the property, and the courts have said that, in determining the fair value of the property of a utility which is a monopoly, good will should not be considered, because there is no good will. Good will can only arise under competitive conditions, where one of the competitors either renders so much better service or offers so much lower rates that people would prefer to deal with that competitor.

Senator NORRIS. I happen to remember now a case where the valuation was made with a view of fixing rates by a utilities commission, in which various items of an intangible nature, amounting, I think, to 47 per cent of the capitalization, were added to the capitalization as a basis for fixing rates. Personally I do not think that was right, but there are men who think it was right, and it was actually done.

Mr. DAHL. Forty-seven per cent; was that covering all intangibles?

Senator NORRIS. Yes.

Mr. DAHL. Why do you not think that was right?

Senator NORRIS. I supposed from what you suggested that the good will should not be used as a basis——

Mr. DAHL (interposing). You used the word "intangibles."

Senator NORRIS. Yes; including good will. I can not itemize, but one of the items, amounting to 15 per cent, was put as its being a "going concern."

Mr. DAHL. Would you mind telling me what case that was?

Senator NORRIS. I do not remember.

Mr. DAHL. Was it a New Jersey case?

Senator NORRIS. Yes.

Mr. DAHL. What you said reminded me of that case.

Senator NORRIS. One of the items was for installation charges that they spent in getting the business on its feet.

Mr. DAHL. And one was for a "going concern"?

Senator NORRIS. Yes.

Mr. DAHL. And you construe that as good will?

Senator NORRIS. No; there was an item of good will in it also.

Mr. DAHL. "Going value" is allowed, but not "good will"; and, of course, there is a clear distinction between going value and good will. You recognize that distinction, do you not?

Senator NORRIS. Yes.

Mr. DAHL. They are not the same thing at all. There are various ways of defining "going value"; but probably the most satisfactory definition, which has been used by some of the courts and public service commissions is this: It is the difference between two supposititious plants, one of them with its installation made and its lines

run to various consumers, but not a customer connected up; and another plant of the same sort, with its installation made and with its customers connected up. Now, there is a certain cost to the company in getting those customers connected up; that is money spent by the company, and that is "going value." One of the ways of arriving at that is this: You take a utility that starts out in a community to get business, and it completes its installation, and it starts out to get customers; it gets one customer, or two, or three. Of course, it can not charge those customers a full return on its investment and operating expenses; it has to go on for a while without making a return on its investment, or even operating expenses, until it gets a sufficient number of customers connected up with its installation, to give it a fair return on its investment, and operating expenses. Now, the money spent by the utility during that period is just as much devoted to the public use as the money which has been invested in the physical property.

Senator NORRIS. When will that period end?

Mr. DAHL. That is a difficult question to answer.

Senator NORRIS. Is it not true that it never does end?

Mr. DAHL. Oh, no; that is not correct.

Senator NORRIS. Now, would you say that in the city of Washington, for instance—I use that as an illustration, because I happen to know about it—that the Washington Gas Light Co. had reached the end of that period?

Mr. DAHL. I do not know anything about the Washington Gas Light Co., or how long it has been going.

Senator NORRIS. It has been going on almost ever since there has been a Washington or for at least for 60 years anyhow.

Mr. DAHL. Then I should say that it had long ago reached the end of its development period.

Senator NORRIS. If you will read the Washington newspapers, you will see that it undoubtedly has a tendency to try and induce people to use the gas, and to try to extend its business and get new customers. Now, do you have any idea that that advertising is part of the capital, or is it part of the running expenses of that institution?

Mr. DAHL. I should say that conservative operation makes it part of the operating expenses.

Senator NORRIS. Well, it will be paid for every year as it goes along; and they have men to talk the business up, and they have special offices where you can talk about it.

And I am not complaining about the practice; it is a perfectly legitimate thing to do; I am only using it as an illustration.

But it would be manifestly wrong to say now, if the city of Washington was going to take that property over, "Here we have been spending all of this money for 50 years, for the purpose of extending our business and making a better business and giving us a greater value as a going concern, and therefore we must add all of those expenses, running through all of those years, to the capital, and let the public pay for it."

Mr. DAHL. Allow me to point out that the fallacy in that argument is this——

Senator NORRIS (interposing). I think it is a fallacy myself; but I am putting it up to you as a logical illustration of your definition of a going concern.

Mr. DAHL. It is not my definition for this reason: That when you come to value a property at any time, you value it as of its then replacement value. In figuring on its replacement value you figure going value, and what the company actually has expended during preceding years in order to create business has no more to do with that valuation than what the company actually expended 50 years before for its physical property. Public-service commissions do not take that into consideration; they figure the present physical value of the property on present prices; and they figure going value on what to-day it ought to cost to establish the business. That is the difference.

Senator NORRIS. I am not arguing now that they should take that into consideration; I do not think they should; please do not misunderstand me.

Mr. DAHL. I appreciate that——

Senator NORRIS (interposing). But the definition you give now of a going concern covers those very expenses that I have itemized, and in my judgment they never end. There would be a time in the organization of the company when there would be a whole lot of expenses like that that would be practically legitimate——

Mr. DAHL (interposing). If you will pardon me, I do not think you understand my distinction. My definition of "going value" is not the one which you just gave.

Senator NORRIS. Well, I believe it was "good will," was it not?

Mr. DAHL. No; "going value."

Senator NORRIS. Well "going value."

Mr. DAHL. You must bear that distinction clearly in mind in order to understand the situation. I defined "going value" and you took my definition and changed it by adding, substantially, "in order to get business for a long period of years."

Now my answer to your construction of my definition is that you construe it erroneously, because the courts 50 years from now would not consider, as the courts do not to-day consider, what the companies actually spend in order to get the business; the courts figure on what, considering everything as it existed at that time, ought to have been expended in order to get the business. That is the difference.

Senator NORRIS. At the end of 50 years the court would allow what it thought the company ought to have expended to get the business?

Mr. DAHL. Certainly.

Senator NORRIS. And my idea is that, if the company has been paid that once, it ought not to be paid it again. I think we agree that it ought to be paid; it is a legitimate charge, assuming that it was reasonably and honestly spent.

Mr. DAHL. Yes.

Senator STERLING. What other intangible element would you include here as something for which payment ought to be made?

The CHAIRMAN. That is in the record already.

Senator STERLING. Then, you need not answer the question.

Mr. DAHL. I will mention some of them: There are the preliminary expenses, such as organization, administration, legal, financial; promotion costs, such as reports, engineering services, interesting bankers and local authorities; compensation to the promoter for his

services: commissions to brokers and underwriters, cost of preparing and marketing securities, and cost of getting money.

Senator NORRIS. Under your item of commission to brokers, would not that be included in the other that you have given as "financing"?

Mr. DAHL. Cost of getting money?

Senator NORRIS. No; you included one term "financing"; does not that include it all?

Mr. DAHL. There are two things: First, the cost of the man who starts the thing and goes out to get the money; that is part of the promotion cost; that is not part of the financing; after he has spent his time in that way, you have got to pay him; that is one element. Then, you have got to pay the broker something; that is another element; they do not duplicate, although the same term might express them both.

Now, these are preliminary expenses. Then, in the construction of the property there are contractors' services and expenses. That is an intangible element or overhead; expenses of supervision; management, incidentals, contingencies, interest, and insurance during construction. All of those are intangible elements which cost money, just as much as the physical property. In fact, they are really a part of the cost of the physical property, but have come to be referred to as "intangible."

There is one other feature of this bill that I should like to discuss—the basis of taking over the property—which I have not heard fully discussed, and it seems to me that it is deserving of some slight attention, and that is the provision by which the United States Government has an option upon all of the property of the lessee, as I construe this bill, for the actual cost of its rights of way, lands, and interests there; that is, all the land which the company might own may be taken over by the Government 50 years from now at the actual cost to the company; and in the case I put, of a large company, which already has large real estate holdings, and the present appreciation in the value of that real estate from the beginning, it must needs lose that appreciation when it accepts a lease under this bill, as I construe the bill.

And I go back to the Pacific Gas & Electric Co. again, because it is such an excellent illustration of this provision—and, by the way, I may say that we are not interested in the Pacific Gas & Electric Co.; I am simply using that company for illustration.

The Pacific Gas & Electric Co., as I understand from Mr. Britton, owns 45,000 acres of land. A large portion of that land has been owned by them for years. The company has been in operation a great many years; it commenced operation in some communities when the communities were young, and it took its chances: and its real estate has appreciated in value. Just for the sake of illustration, if the 45,000 acres of land cost them $1,000,000, and that land is worth $10,000,000 to-day, then, as I construe this bill, when that company takes out a lease under the bill, they must surrender their $9,000,000 of appreciation in land values.

Senator NORRIS. You are certainly wrong in your construction of the bill; I do not believe anyone will sustain that view.

Mr. DAHL. I did not think you would when you asked for an illustration.

Senator STERLING. That is very nearly the wording of the bill, Senator Norris.

Senator NORRIS. No; I do not think so.

Mr. DAHL. I think you will agree to this, at least, that when some of the members of this committee, and when some distinguished lawyers that I could name to you construe the bill in that way, it would not be safe for a company to accept a lease under the bill, would it?

Senator NORRIS. I think I heard one lawyer construe the bill so that it did not include that construction, as I remember it.

Mr. DAHL. No; the lawyer to whom you referred was asked whether the bill gave the Government the option to take all or a part, and his answer was that if the Government was to be given any option it should be only to take it all.

Senator NORRIS. The one I am speaking of now is the lawyer who did not want the Government to have the right to take all the property the party had leased from the Government, and not take the balance.

Senator STERLING. Of course not.

Senator NORRIS. Now, you figure that if they take any of it over, they are going to take it all?

Senator STERLING. No.

Mr. DAHL. You do not understand——

Senator NORRIS (continuing). His argument was that the Government will take this thing which they leased, and that will leave the other property of that lessee connected with it up in the air, and it will not be worth anything.

Mr. DAHL. You do not believe that is right, do you?

Senator NORRIS. I do not think that would occur.

Mr. DAHL. Well, you do not think it would be safe for a power company to give the Government that kind of option, do you?

Senator NORRIS. No; but I do not believe it would occur. On the other hand, if the Government were to take over all the property and the company owned a lot of real estate-- they might own a building devoted to office purposes, for instance, and a whole lot of things that the Government would not want or have any use for; it would be entirely outside of the Government's business, and somebody would want the Government to take that over.

Mr. DAHL. Well, do you not think that if the Government is going to take over anything it should take over all of the property that is dependent on the lease?

Senator NORRIS. Well, it would depend—I do not think the Government ought to take that property over, in the case you put, of some companies that may have thousands of acres of land—or a million acres—and I understood that was what you were complaining about.

Senator SMOOT. I never heard of such a complaint.

Mr. DAHL. Well, I think you misapprehend what was said.

Senator NORRIS. Perhaps I do.

Mr. DAHL. And I heard the discussion to which you refer. The objection which was made was that the bill as it stands gives the Government an option to take all or a part; and you will agree that it is not proper for the Government to take a part of the property leased and leave the rest up in the air. That was the objection which was made.

Senator NORRIS. I agree with you that that part of the section is ambiguous, and of course I agree with you that it ought to be clear.

Mr. DAHL. Now, my position on that is this: That if the Government has any option, its option must be to take over all of the property which is dependent, in whole or in part, upon the lease. But that option must be upon fair terms to the company, and if it is not fair to the company—and in the case you put of some real estate that is not owned for the purposes of the company, but which they may own for speculative purposes, that is not covered by this provision, and should not be covered by it.

But the Pacific Gas & Electric Co. now has 45,000 acres of land, and that land is used for transmission lines, power houses, substations, and other purposes of the company. In that case, where the real estate is used for the purposes of the company, you will agree with me that you could not expect the power company to agree to come in and surrender that property under this lease.

Senator STERLING. If that 45,000 acres was dependent in whole or in part for its usefulness upon the continuance of the lease provided for herein, would you say that the Government should take it over?

Mr. DAHL. Yes.

Senator NORRIS. Because they have connected the two with a line, because they are using them interchangeably, some people might say that is dependent in whole or in part. In my judgment, that is not the theory of the law at all. And the very fact that they are in operation now without any lease from the Government is to my mind a demonstration that it would not be held that it was dependent in whole or in part. I am aware that while it might perhaps do it, probably would, at the same time it would not be dependent because it would have existed before.

Mr. DAHL. Now, don't you see, though, that the new development is constructed by a company that already has an existing power?

Senator NORRIS. Yes.

Mr. DAHL. And that is part of the development as the system develops. Now, assume that it is going to develop 20,000 kilowatts, and then it proceeds to go out and secure new business to the extent of that 20,000 kilowatts; you can not separate the kilowatts you generate from that plant from the kilowatts that go into the same line as part of the whole generated power, and you can not separate them and say which particular part of the business was dependent upon this particular new development. It is all tied in together.

Senator NORRIS. I presume, if you tied it up with the transmission of power you were already getting, that many difficulties would arise out of that. But in the case I put I supposed a new plant and a new development, and it may be a new field that was developed, and they connect the line with their old power plant. Now, I can conceive that you might possibly fix up a condition where there might be great difficulty in separating the two——

Mr. DAHL. Yes.

Senator NORRIS (continuing). So as to say that the original power is there and the new power is here: but they could be separate and each one could run along as they did before, it seems to me, or at least the old one could. There might be some trouble about the new one.

Now, let me say to you, Mr. Dahl, with reference to all this argument about what is going to be done in 50 years, I am inclined to think, particularly in this kind of electricity—because I think all the people concede that the United States in 50 years will undoubtedly see new developments made—that the men living now, with all the light we have, can not possibly imagine what the conditions will be at that time.

Mr. DAHL. No; and you would not want to put your money in.

Senator NORRIS. I have asked several people who have been here this question, whether, knowing that it is true, perhaps, say, in 50 years from now, the conditions would be so different that laws applicable now would hardly be applicable then, why would not this proposition I supposed meet the difficulty—to say that at the end of the 50 years the Government should have the right to take over the property on such conditions and under such laws as might then be in existence?

Mr. DAHL. Well, you can adopt such laws as the Congress of the United States might pass then for the purpose of taking it over.

Senator NORRIS. I presume so.

Mr. DAHL. That is, you mean to let the Government take it over on its own terms.

Senator NORRIS. If the Government could fix the law now, it could fix it 50 years from now, and you are going to take it over, if it is taken over at all, under the laws of the Government, are you not?

Mr. DAHL. Yes; but the difference is this: If the Government writes a law now, I know what is in it, and I know, when I go to invest my money, it is going to take it over on those terms. But on your proposition I might invest my money to-day, and I do not know what kind of a law the Government is going to pass 50 years from now. That is exactly the law and regulations of the revocable permit, which says the property may be taken over on such terms as the Secretary may fix. The only difference here is, you see, the property may be taken over on such terms as Congress makes now.

Now, you would not put your own money into such a proposition?

Senator NORRIS. Yes; I would. I think that is fair. If it is going to be taken over at all, it is going to be taken over under the law of Congress. You have got to assume, in your case, that the Government is going to undertake to do something which is not fair if you take your view of it.

Mr. DAHL. Why not leave it to the courts?

Senator NORRIS. I do not know. I have had incorporated in the hearings here, and I had it put in with a view to taking it up for discussion before the committee, the law of Oregon, under which men who are opposing this bill, like you are, state there has been a great development and the law, for instance, has been perfectly satisfactory. Now, that law states that the lease shall run for 40 years only, and at the end of the 40 years the property can be taken over by the State under such law as may be in existence at that time.

Mr. DAHL. That is, a water right?

Senator NORRIS. It is a power.

Mr. DAHL. That is purely a water right.

Senator NORRIS. I take it it is a development of power.

Mr. DAHL. Yes. I have not read that law, Senator, but I am frank to say to you there has been a great deal of dissatisfaction with that law——

Senator NORRIS. I would like to hear from you on that, because I want to get the facts.

Mr. DAHL (continuing). And the law probably will be changed.

(The following is the brief on intangibles submitted by Mr. Dahl:)

THE FERRIS BILL AND INTANGIBLES.

Section 5 of H. R. 16673, designating the terms upon which the United States may take over the property of any lessee, after specifying that only actual cost shall be allowed for rights of way, water rights, lands, etc., establishes the standard of "reasonable value" for all other property, with the limitation, however, that such "reasonable value" shall not include or be affected by "the value of the franchises, or good will, or profits to be earned on pending contracts, or any other intangible element."

Passing for the present the injustice of limiting the value of rights of way to actual cost, and thereby depriving the utility of any appreciation in its land values, while charging it with depreciation of its other property, the following discussion deals solely with the exclusion of every "intangible element" from the valuation to be placed upon the property of the lessee when it is taken over.

The result of the application of this theory would be that the utility, by accepting the lease upon such terms, gives to the Government an option upon all its property at a price vastly less than original cost, and also vastly less than the reproductive value of the property at the time it is to be taken over. Without discussing whether any value should be allowed for franchises, good will, or future profits, the use of the term "any other intangible element" in connection with these specific elements of value would seem to indicate that the author places intangibles in the same class with franchises, good will, and future profits. But this is an incorrect classification. So many people do not understand what is covered by the term intangibles or overheads that they immediately object to any allowance being made therefor, apparently on the theory that they include speculative profits, or some elements of value for which the utility has made no expenditure—elements of value which accrue to the utility through its operation over a long term of years and through the growth of the community. But this also is a wrong conception.

It may be that the author of this bill does not contemplate that intangibles or overheads, which are properly a part of the actual value of the property, should be excluded, but the language of this bill, if uncertain in its meaning, must be resolved in favor of the Government by the utility contemplating acceptance of a lease, because the utility can not accept a lease running over a period of 50 years without foreseeing exactly the worst that may occur upon the expiration of the term and guiding itself accordingly. Such a broad statement as that the value shall not be affected by "any other intangible element" must be treated by the lessee as though the courts would consider it to mean the exclusion of every overhead and every intangible element—that is, every element that can not be touched and seen and felt.

The exclusion of every intangible element in this broad way results in the Ferris bill departing radically from those well-established principles which are recognized to-day by the public-service commissions and the courts in the valuation of the properties of utilities. In valuing such properties the function of the public-service commission is different from that of the court, which reviews the decision of the commission. The court only reviews the decision if it is claimed that its effect is to confiscate property. The commission deals with the broader commercial features of the situation and must act with reference to what is generally fair to the utility and what will result in attracting capital to the community. The Ferris bill not only adopts a standard narrower than that applied by any public-service commission in the United States, but it also adopts a standard narrower than that applied by any court with which the writer is familiar, when such court has been called upon to determine whether the result to the utility is confiscation. The conclusion is that the Ferris bill adopts a policy of confiscation.

The history of the valuation of the property of public utilities for rate making, purchase, or condemnation purposes shows that the word "intangible" has come to be used and applied to a great many elements of value for which the utility has made actual and substantial expenditures and which are as essentially a part of the value of the property of the utility as wires, poles, dams, generators, and rights of way. It has also come to be recognized that exclusion of these elements of value from the amount of the investment upon which the utility is permitted to earn, or their exclusion from the ultimate value fixed upon the property for purchase or condemnation purposes, is as much confiscation as would be the exclusion of a portion of the tangible physical properties themselves. No utility can be established and no physical property can be created without the expenditure of large sums for elements which are really as much a part of the physical property as that which can be seen and touched, but which nevertheless have in recent years been classified as "overheads" or "intangibles."

The case of Adams Express Co. v. Ohio, 165 U. S., 194; 166 U. S., 185, illustrates the importance of so-called intangible elements in the valuation of property. This was a tax case coming to the United States Supreme Court from the Supreme Court of Ohio. The real estate and tangible property of the company formed but a small part of the total value assessed against it. The courts of Ohio held that the company should be taxed upon the value of its entire property—not only its tangible property. In affirming this decision the United States Supreme Court said:

"In the complex civilization of to-day a large portion of the wealth of a community consists of intangible property." (P. 218.)

"Whenever separate articles of tangible property are joined together, not simply by a unit of ownership, but in a unity of use, there is not infrequently developed a property, intangible though it be, which in value exceeds the aggregate of the value of the separate pieces of tangible property. (P. 219.)

"In conclusion, let us say that this is eminently a practical age; that courts must recognize things as they are and as possessing a value which is accorded to them in the markets of the world." (P. 225.)

Illustrative of the importance of intangibles or overheads in the statement of Mortimer E. Cooley, dean of the department of engineering of the University of Michigan, who has represented the public in so many instances, and whose standing is so high that he can not be charged with bias in favor of the utilities. In an address delivered by him in 1911, before the annual meeting of the American Electric Railway Association, Mr. Cooley said:

"In the valuation of the property of public-service corporations aggregating more than $1,000,000,000, I have had the honor to serve both the public and the corporation. * By far the greater part of my work along these lines has been done for the public. Having in the beginning and for about seven years worked exclusively for the public, I naturally began my study of the problem from the side of the public, and it might be said, as against corporation."

Mr. Cooley further stated, in the same article:

"While the difficulties pointed out are real, so far as the public is concerned, they are many times magnified when it comes to comprehending the possible total of overhead charges which may apply to a property. Depending on locality and whether certain of the items discussed may or may not be included in the cost without being separtely stated, the total of overhead charges may vary from 20 or 25 per cent to 50 or 60 per cent of the cost as determined by the inventory; that is to say, the total cost of the property will vary from 120 to 125 per cent to 150 or 160 per cent of the cost as determined from the inventory of the physical elements alone. The larger percentages will usually be found in the larger cities."

On January 7, 1914, Mr. Cooley delivered another address before the Western Society of Engineers of Chicago, in which he said:

"It will surprise everyone not familiar with the cost of building utility plants to learn that the so-called overhead charges are in the aggregate a large percentage of the costs of labor and the material things entering into their construction. Omitting preliminary costs of investigation as to the feasibility of the project, general contractor's profits, cost of promotion and promoter's profits, interest on floating debt and cost of establishing the business, and assuming that the individual contingencies of construction, special engineering charges, and contractor's profits are embraced in the cost of physical property, the total percentage may vary from 12 to 25 per cent, and if those inside percentages be added to the outside or general percentages, the total percentage may vary from 30 to 60 per cent."

While the decisions of commissions and courts will be considered later in greater detail, attention is called now to a few cases decided by well-known and highly respected public-service commisions where the so-called intangibles or overheads have been found to amount to a substantial percentage of the tangible property.

In re Queens Borough Gas & Electric Co. case, decided by the New York Public Service Commission, first district, June 28, 1911—a rate case—the commission says:

"There are certain expenses connected with every undertaking which are not represented by physical property but which must be incurred before the plant is operated. These relate to the initial promotion of the scheme and the organization of the company. Investors must be interested, lawyers and engineers must be consulted, and franchises and permits must be secured. Interest and taxes during the period of construction must be paid, and as there are no earnings, they must be included as a part of the cost of the undertaking. There are also other expenses connected with the experimental and trial operation of machinery and the adjustment of various parts, etc., which antedate operation."

In the above case the commission allowed a total of 41.4 per cent of the net cost of property other than land for intangibles and overheads, and this exclusive of going value. This percentage was divided as follows:

	Per cent.
Contractor's profits, engineering, administration, contingencies, and incidentals	19.5
Preliminary and development	16.8
Working capital	5.6
Total	41.4

In the case of John C. Mayhew et al. *v.* Kings County Lighting Co., decided by the New York Public Service Commission, first district, October 20, 1911, the commission allowed a total of 42.6 per cent on the net cost of property other than land for overheads and intangibles, exclusive of going value.

In the case of Edward C. Baits *v.* Brooklyn Borough Gas Co., decided by the New York Public Service Commission, first district, August 18, 1911, that commission allowed a total of 50.4 per cent on the net cost of the property other than land for overheads and intangibles.

In the case of Public Service Gas Co., decided by the Board of Public Utility Commissioners of New Jersey December 26, 1912, the commission allowed a total of 51.45 per cent for intangibles and overheads.

Applying the provisions of the Ferris bill to a utility with an actual investment of $100,000,000, of which $70,000,000 is represented by tangible physical property and $30,000,000 by intangibles and overheads, fairly and legally an essential part of the original cost, and also an essential part of the reproductive value, if such a company desires to utilize any portion of the public domain, no matter how small, it must give the United States an option to buy for $70,000,000 that which actually cost the company $100,000,000.

Among the elements which are frequently considered as "intangibles" or "overheads," but which enter into the cost of reproducing physical property just as much as labor or material, are the following:

1. Contractor's services and expenses.
2. Engineering and supervision.
3. Administration and management.
4. Omissions.
5. Incidentals and contingencies.
6. Interest and insurance during construction.

These are all elements which are recognized by courts and commissions today in dealing with the valuation of property of utilities for rate making, purchase, or condemnation purposes, and they are all elements which enter into the actual expenditures a utility must make in order to construct its property and establish its business.

Other elements of value and also elements of actual cost to the utility antedating the expenditures which the utility must make in the actual construction of its property, but nevertheless an element of cost to the utility before it can reach the point of construction—elements which are also recognized by the courts and public-service commissions—are the following:

1. Preliminary expenses, such as organization, administration, legal, and financial.

2. Promotion costs, such as reports, engineering services, interesting bankers, investors, and local authorities.

3. Compensation to the promoter for his services.

4. Commissions to brokers and underwriters, cost of preparing and marketing securities.

5. Discount on securities sold.

Another element of value which is frequently considered as an intangible, but which, nevertheless, in reality has as tangible a foundation as any other element because it is in every case the result of either actual expenditure made by the company or actual loss sustained by it, is that of going value. Decisions of the courts and commissions are hereinafter cited explanatory of going value and holding it an essential part of any fair valuation of the utility's property.

CONTRACTOR'S SERVICES AND EXPENSES.

In dealing with the original cost of its property to the utility, and also in dealing with its reproductive cost or value, an allowance must be made for contractor's services and expenses. This follows because the construction of the plant of a utility is not usually made by the company's own organization, for in practice it is found cheaper to employ an independent, experienced, and skilled contractor. But even though the construction work is done by the company itself, a similar allowance must be made, because the company must be paid for its services in acting as a contractor. The usual amount allowed by commissions for this so-called "overhead" or "intangible" is 10 per cent of the cost of the work.

In Hill v. Antigo Water Co. (3 W. R. C. R., 623), the Wisconsin Commission, on page 645, said:

"Contractors' profit is an item that usually enters into the cost. In some cases it is divided among or added to the several parts. In other cases, again, it is given separately in a lump sum, as is the situation here. In this particular case it appears to have been placed at about 10 per cent on the cost of the material and labor required for the actual construction."

Town of Falmouth v. Falmouth Water Co. (180 Mass., 323) was a case of purchase by the town of the water works of the company, under a statute giving to the town the right to purchase at actual cost. The company claimed that actual cost should include a contractor's profit. The court said:

"It is true that actual cost excludes everything in the nature of a profit but what is actual cost to the company includes a profit to the contractor, just as what is actual cost to the contractor includes a profit to the merchant of whom he buys his material. The company had to pay a profit to the contractor, as the contractor had to pay a profit to the material men."

In the Consolidated Gas case, in the State of New York, there was allowed for contractors' profit 15 per cent. (See Master's report, p. 29.) This was affirmed by the courts. (See Wilcox v. Consolidated Gas Co., 212 U. S., 19.)

The California commission, In re application James A. Murray et al., for increase in the rates, etc., allowed 10 per cent for contractors' services and expenses. (See Decision No. 536, p. 54.)

In the Queens Borough case, the Brooklyn Borough case, and in Kings County Lighting Co. case, the New York Public Service Commission made liberal allowances for contractors' profits. The same commission made a similar allowance in the Coney Island case, where 10 per cent was allowed on the entire cost of labor and material, and in the Third Avenue Railway and Metropolitan Street Railway reorganizations.

In the agreement between the city of Chicago and the Chicago Traction Co. is found the following provisions:

"The company shall purchase materials and equipment and employ engineers superintendents, clerks, foreman, and workmen, and shall pay all expenses of every nature, including legal expenses, necessary to the proper, complete, and prompt performance of the above-mentioned work, upon the lowest advantageous terms and subject to the approval of the said board of supervising engineers, and to the actual amount paid by the company in and about carrying out each and all of the requirements of this section shall be added 10 per cent of such amount as a fair and proper allowance to the company (out of additional capital funds) provided by it, for conducting the said work and furnishing said equipment."

Mr. Floy, in his work on "Valuation of Public Utilities," at page 64, says:

"The unit price made upon the 'subcontractors' basis' includes what may be fairly considered as only a manufacturer's profit for the production of the several elements which must be assembled into a harmonious, operating whole by some entrepreneur, for whose services and direct expenses an allowance of 10 per cent called 'contractor's profit,' is quite generally recognized as a fair and proper allowance. Where no such percentage is shown in valuation tabulations it will usually be found that the unit prices allowed are enough higher to include the contractors' percentage. The items of contractor's profit, as well as engineering, incidentals, etc., if not included in the unit prices applied to the inventory to obtain the cost of the physical property, may be added as a percentage after the net value of the structures is obtained as above explained, or they may be grouped with nonphysical values, but they are always included in one place or the other in every fair valuation, though perhaps not at first apparent. Except in the rarest cases, work will not be performed or the materials furnished without a profit to the contractor, and though unit prices may be made on the basis of contractor's bids or contracts, without any added allowance for profit or contingencies, said bids or contracts have, of course, been made by the contractor to include a profit and necessary allowance for incidentals and contingencies. The percentage for contractor's profit is based on the cost of such labor, material, and apparatus as is ordinarily contained in the inventory of the physical plant, aside from real estate, rights of way, material, and supplies, or other property purchased more advantageously by the corporation direct.

"From experience, it has usually been found that it is as cheap or cheaper for a corporation to employ a general contractor to take charge of and direct any large piece of work than to itself undertake to carry out the work. The reason for this is that, working to definite plans and specifications, fitted by special experience for construction work, concentrating all effort and energy to a single purpose, a capable contractor can do the work more efficiently than the corporation, which is primarily equipped for operation and not for construction.

"The percentage allowance of 10 per cent is based upon the charge which has been frequently made by responsible contractors who undertook the work for the owner at the latter's risk."

ENGINEERING AND SUPERVISION.

Allowances are always made by courts and public-service commissions for engineering and supervision, for it is recognized that no plant can be constructed without engineering services, both in designing the plant and in supervising its construction, and yet this is one of the elements included in the term "overhead" or "intangible." The allowance is usually at least 5 per cent for engineering alone. This percentage is recognized to be a conservative allowance by the best authorities on the subject. Prof. George F. Swain, an eminent engineer, and for many years consulting engineer of the Board of Railroad Commissioners of Massachusetts, in his report to the joint board on the valuation of assets and liabilities of the New York, New Haven & Hartford Railroad, discusses what percentage should be allowed for engineering in the valuation of public utilities. After stating that 5 per cent is a common allowance, and that the allowance is "frequently greater," he cites three cases—the East Boston Tunnel, where the allowance was about 6.4 per cent; the Washington Street Tunnel, where it was about 6.1 per cent; and the Metropolitan Water Works, where it was about 6.2 per cent. He says that a charge of 5 per cent will be found to be low, and that "personally I believe it should be not less than 6 per cent."

In the case of Monheimer *v.* Coney Island & Brooklyn Railroad Co., decided September 15, 1909, by the Public-Service Commission of New York, first district, Commissioner Maltby stated that engineering and administration alone were often 10 per cent.

OMISSIONS, CONTINGENCIES, AND INCIDENTALS.

These are elements which enter into every human appraisal. They take into account the error of the appraiser in omissions from the inventory and also the error of the person making the estimate in estimating the cost of construction new. Experience has shown that the best engineers err in estimating the cost of doing any considerable piece of work, and that the actual cost practically

always exceeds the original estimate. Allowances are always made for these elements.

In City of Beloit v. Beloit Gas & Electric Co. (7 W. R. C. R., 187) the Wisconsin Commission said:

"It is ordinarily impossible for the designer of plants, such as those involved herein, to foresee the exact conditions and contingencies which may be encountered in the actual construction work. This is true to some extent even where specifications and estimates are drawn by men of large experience and familiarity with local conditions. Again, it is seldom but what departures are made from specifications, due to new inventions, changes of policy on the part of those in control of the work, the encountering of unforeseen conditions, and for numerous other reasons. In fact, specifications are often purposely left open in some particulars to permit of changes due to later decisions by those in charge."

In the appraisal of the State railways of Massachusetts there was allowed for contingencies 5 per cent (Whitten, "Valuation of Public Utilities," 225), in the appraisal of the Michigan steam roads there was allowed 10.8 per cent (Whitten, 227); in the appraisal of the Minnesota steam roads there was allower 5.2 per cent (Whitten, 228); in the appraisal of the South Dakota steam roads there was allowed 5.7 per cent (Whitten, 223); in the appraisal of the Wisconsin steam roads there was allowed 5.5 per cent (Whitten, 237).

COSTS PRELIMINARY TO CONSTRUCTION.

There are a great many expenditures which must be made by a utility before it comes to the point of construction. An investigation must be made to ascertain whether it is profitable to develop a utility in that particular community; engineers must be employed to report on the character of the community and to make estimates as to the amount of service which will be demanded. Lawyers must be employed to advise as to the laws of the particular community as to franchises and to report on titles. Capital must be employed in all these matters before the property reaches an earning basis; securities must be sold and brokers' commissions paid therefor, and those promoting the utility must be paid for their services. In the Queens Borough case the New York commission allowed for preliminary and development expenses 15.5 per cent of all the physical property other than land. In the Brooklyn Borough case it allowed for these items 21.5 per cent, and in the Mahew case it allowed 15.65 per cent of the cost of all the physical property other than land, figured on reproduction cost new.

In the Menheimer v. Brooklyn Union Elevated Co. case (No. 351) the New York commission said:

"The foregoing items of valuation do not include any allowance for easements or for other real-estate values in excess of the assessed valuation. Neither do they make any allowance for the franchise values nor for a considerable amount of development expenses, as, for example, interest during period of construction on capital used in construction, reasonable profits of promoting the enterprise, preliminary legal expenses of organization and other legal preliminaries, cost of complying with various preliminary requirements of law. All of these items would be absolutely essential disbursements in the reproduction of any existing railroad, and they would add considerably to the figures of valuation given in the foregoing estimate if proper allowance were made for them. * * * It is to be borne in mind in this connection that physical assets are not the only real and valuable properties of a company upon which it is entitled to a fair return. There are numerous other elements which may be properly regarded as capital charges to be considered."

PROMOTERS' LEGAL AND ENGINEERING SERVICES.

In Floy on "Valuation of Public Utility Properties," at page 122, it is said:

"It is difficult to appreciate why anyone should raise a question as to the propriety of compensation to the organizers or promoters of an enterprise.

"The services of the promoters are in some respects like those of the engineers who design the physical property. No one denies proper compensation to the engineers for determining the kind of plant to be used and superintending its purchase and installation, but it is the organizers who conceive the undertaking, evolve the plans, promote the enterprise, and supply the energy which takes the hazard, and obtain the means to carry the venture through to success."

The report of the Railroad Securities Commission, consisting of Arthur T. Hadley, Frederick N. Judson, Frederick Strauss, Walter L. Fisher, and B. H. Meyer, to President Taft, under the head of "Promoter's Profits and Services," at page 30, says:

"We are told that the profit of the promoter represents a wholly unnecessary burden upon the American public, and that so far as this profit can be done away with it will be good for all parties. Neither of these statements is quite true. The promoters, using the term in a broad sense, may be divided into two classes—constructors who build a road whose future is uncertain, in the expectation of selling the stock for more than it costs them, and financiers who induce the public to buy the bonds of such roads. Both of these classes, if they do their work honestly, render useful services to the public. The constructor gives our undeveloped districts the benefit of new roads, which they would not get without his intervention; and if he does his business well, he builds the road more economically than anybody else could. The financier renders an equally important service in collecting the capital of the investors to build new railroads or improve old ones."

In the case of Rochester, Corning & Elmira Traction Co. the New York Public Service Commission, referring to compensation for services of promoters, says that such services "should be fairly and even liberally rewarded by the public which receives the benefit of these works. Such rewards, however, should be put upon a clear basis of business principles, should be of sufficient magnitude to encourage rather than discourage enterprise, and should not be so great as to make an exorbitant demand which is perpetual upon the community to be served. They are to be treated simply as just payments for services performed for the corporation, which services are valuable and in many cases even indispensable. Such services should be paid for upon the basis of what they are fairly worth, having regard to all the circumstances of the case."

In the case of Central California Gas Co. (vol. 2, p. 116, of California decisions) the California commission says:

"The commission is of the opinion that promotion and organization expenses, honestly and wisely incurred, are as necessary to the success of a public utility and are as properly the subject of capitalization as the cost of the component parts of the utility's physical plant or system, and that the same should be paid for in cash, where possible, at their reasonable value to the utility. Wherever possible the moneys actually spent on these items should be ascertained and reimbursement made for them. While it is not always easy to estimate the value of a promoter's services, inquiry should be made as to the amount of time which he has devoted to the organization of the utility and to the reasonable value of the work such as that which he performed during that time. A public authority, in estimating the value of such services, should be liberal, so that men of ability may be attracted to the development of new utility enterprises where needed for the development of the State. The need for a liberal policy in this regard is particularly apparent in States like California, in which there is still a wide field for legitimate new public utility development. It may well be that in addition to a reasonable compensation for the time devoted to the work the promoter should be allowed an additional remuneration to compensate him for his risk of failure and the use of such money as he may have invested in the organization and promotion of the enterprise. In this, as in other respects, this commission believes that the State of California should deal liberally with those who, by the establishment of utility enterprises, are aiding in the legitimate development of the State."

In the case of San Rafael & San Anselmo Valley Railway Co., decided November 11, 1913 (Decision No. 1075), the California commission approves $2,500 in stock, $1,700 in bonds, and $5,000 in cash, in all, $9,200, to the promoter of a projected railway applying for issuance of stock and bonds aggregating $97,379.92. This would be allowing in bonds and cash $6,700, or 7 per cent of the total cost of the project.

COST OF MONEY.

The cost of getting money may be illustrated by assuming a case where a company obtains all the funds required through the sale of its stock at par. Nevertheless, in the nature of the thing, it costs the company something to sell its stock. It is sold by the company direct to the public. The company is put to the expense of either paying for the time and expense of men to solicit the public to buy the stock, or the company is put to the expense of paying for advertising and many other expenses. If a company needed $1,000,000 to

construct its plant and could sell this stock at par and it cost the company $200,000 to sell this stock, obviously this additional $200,000 would be an actual cost to the company of obtaining the $1,000,000 to construct its plant. It would not appear by way of discount nor as organization expense. It might be paid by the company out of the proceeds of the $1,000,000 of stock, the same as freight or labor, or the company might issue additional securities for $200,000, and in that event there would be $1,200,000 of securities issued at par for cash. But in any event, this expenditure is not theoretical, but is actual and is unavoidable and must appear and be recognized somewhere. Experience has shown that it is most economical to dispose of securities through those who make that their business, and pay them a commission, precisely as when disposing of real estate it is recognized as economical to do this through a real estate agent and pay him a commission rather than that everybody should be his own real estate agent.

In National Telephone Company v. *H. M. Postmaster General*, decided by the Court of Railway and Canal Commission of Great Britain, January 13, 1913, under an agreement to purchase the property of the telephone company by paying its value, exclusive of any allowance for past or future profits, the company claimed that an overhead allowance should be made for the cost of raising capital. The postmaster general resisted this item. The court allowed a substantial percentage and said:

"Next, it is said that the cost of raising the capital necessary to construct the plant is not an item to be taken into account in finding the cost of its construction. This does not mean the cost of raising the price to be paid by the postmaster general under this award. It means the cost to which anyone is to be put who attempts to construct this plant. The method prescribed by the House of Lords for ascertaining value is to consider what it would cost to construct the plant; that is, would, as a fact, cost.

"The first question, then, is, Would it, in fact, cost anything to provide the necessary capital? The company have given evidence, by way of example, that it cost them 4.41 per cent to raise 5,500,000 pounds. No one has given evidence that it would not cost anything, nor has that proposition been put forward even in argument. I know of no commodity and no service that can be procured as of right for nothing. I am clear that, as a fact, money can not be procured for nothing. It was further urged that this item of cost was to be attributed or charged to the business and not to the plant. In so far as this argument excludes the cost of raising any capital other than that required in order to construct the plant, I agree with it. We have nothing to do with the cost of raising any capital other than the amount which would be necessary in order to construct. If the argument means that even this part of the capital required should be attributed to the business and not to the plant, I am unable to follow it. It seems to be founded upon some conventions of bookkeeping, proper in their own sphere, but which have no relation to the problem under consideration, viz, What would it cost to construct the plant? The cost of getting the money to pay for the materials, labor, etc., has no nearer connection with the 'business' than the materials and labor themselves.

"It has been said that it can not be an element adding to the value of the plant. The thing transferred here is the plant in situ, and the cost of construction, less depreciation, is the method by which the value has to be ascertained. It follows that every expense which is necessary in order to construct is an element to be considered, and it has to be considered because it is necessary in the process of construction. The thing to be transferred, say, a pole must be procured, transported, and erected; each of these steps is necessary to the existence of the pole in situ; each of these steps costs money, and raising this money is itself an expense and is one as necessary to the existence of the pole as any of the other steps.

"This is clear even in the case of one pole, but when the money required amounts to millions, it becomes clearer, for no one has millions of pounds in his pocket, or even, I suppose on current account at his bankers. The result of this is that this cost stands out and is seen clearly. It has not become merged in less conspicuous matters as it may do in illustrations like motor cars and pianos put to us by the solicitor general. The price of these, as of all things in which there is competition, is governed by the market price, but even this, if the market is to be stable and sound, must cover all the items of expense necessary to production. It is not true to say that this involves the proposition that the value of plant varies with the credit of the conductor. The cost to be considered is the cost of the hypothetical constructor who is a person in

good credit; or, in other words, what it must cost any constructor, even the postmaster general, who has the credit of the State on which to raise the necessary capital.

"Again, this does not involve the conclusion that the cost of raising capital should be added to the price again if the property should be transferred a second or a third time; it is an item of value once and once only, namely, on the construction of the plant, and it is merely because it is necessary in order to construct that this item comes into the calculation at all. That it must be included is apparent, if it is tested in a case in which the sale takes place immediately upon the completion of the construction.

"Assume the plant to cost £10,000,000 to construct, out of which £300,000 has been properly and necessarily spent in raising the capital required to pay for its construction. If the constructor were to receive the cost less this £300,000, he would get £8,700,000 only, and would lose £300 000 by the transaction. It makes no difference whether the constructor does the work himself or does it by means of a contractor. Whoever raises the money necessary to pay for the materials, labor, etc., is put to the expense of raising that money. Every necessary cost must appear in value, otherwise no sane person would ever knowingly construct; for, if it does not appear in value, it must result in loss, and to say it should be relegated to loss is to deny the principle upon which we are agreed, that value should be ascertained by finding what it would cost to construct the plant. Unless, then, it can be affirmed that money, unlike other commodities, can be procured without expense, it is clear that this item must be included at its proper amount. In other words, we must either refuse to follow the formula approved by the House of Lords and agreed to by the parties, or find, as a fact, that money can be procured for nothing. I am not able to adopt either of these alternatives. I think a reasonable amount must be allowed under this head of claim. I have cut this item down to a low figure, and the amount stands, after depreciation, at the sum of £247,189."

GOING VALUE.

What the term "going value" means and includes is not generally understood by those unfamiliar with the public utility business or with the decisions of the courts or commissions on this subject. Going value is not synonymous with franchise value. It does not mean good will; it does not include something vague and speculative. It is not based upon possible future profits. It does include that for which the utility has expended cash. It does include that which the United States could only obtain by an actual expenditure if it were to construct and initiate the operation of the property upon which it takes an option from the lessee under the terms of the Ferris bill. Allowance for going value is bottomed upon the sound principle that a utility is entitled to a fair return upon its actual investment from the inception of the enterprise. It is a recognition of the fact, the result of experience, that upon the completion of the utility plant it is impossible to have an immediate supply of customers sufficient to pay all operating expenses and a fair return on the total investment. Assume the investment by a utility of $1,000,000 in its plant and property. The company proceeds to solicit customers. Shall the first few customers be charged rates sufficient to pay operating expenses and a fair return on the $1,000,000? Obviously not. Nor should the utility sustain the loss resulting from this period of building up its business. It would be equally unfair to place this burden upon those current customers immediately succeeding the period when sufficient customers have been obtained to pay expenses and a fair return. But unless the utility is to be deprived of its right to earn this fair return from the beginning, these early deficits—inherent in the very nature of the business—must either be paid by subsequent customers in toto, or they must be capitalized, thus imposing upon subsequent customers not the burden of the entire early losses, but only interest thereon; and so it has been recognized by courts and commissions that the capitalization of these early deficits is fair, and they have been recognized as elements of going value; that is, something which it has cost the company to establish itself as a going concern.

It is also recognized that it costs money to get business. Utilities make large expenditures in advertising, soliciting, and demonstrating the value of the services they render in order to acquire business. For these expenditures the utility must be reimbursed, and there are likewise but two ways of receiving such reimbursement—either by charging this expense to current consumers or by

capitalizing it. Whether securities are issued for it is beside the question. The fact remains that the company has expended money to get business, and it is entitled to be reimbursed for such expenditure; and so the capitalization of the cost of getting business has been recognized as an element of going value.

No one can fail to recognize the superior value of a plant with customers and an established business from one without either. The United States when it takes over the property of a lessee with customers and a going business is certainly acquiring something of greater value than the mere plant without either. Why, then, should not the United States pay for value received?

One method of determining going value, as outlined in the Kings County lighting case (hereafter referred to) is the assumption of the existence of two plants, situated exactly alike, in the same community, and with the same physical property—first, the actual plant with its established business; second, a suppositional plant with no business. The estimated length of time and expense required by the second plant to develop its business to the stage and revenue of the actual plant is the going value of the first. By the Ferris bill the United States seeks to get for nothing the value produced by this expenditure made by the utility.

In Brunswick Water District *v.* Maine Water Co. (59 Atl., 537), the court said:

"We speak sometimes of a going concern value as if it is or could be separate and distinct from structure value—so much for structure and so much for going concern. But this is not an accurate statement. The going concern part of it has no existence except as a characteristic of the structure. If no structure, no going concern. If a structure in use, it is a structure whose value is affected by the fact that it is in use. There is only one value. It is the value of the structure as being used. That is all there is of it. * * *

"What is it, then, that the district is taking and for which the company is entitled to a just compensation? It is a structure in actual use, and with a right on the part of its owner to so use it and to charge reasonable rates to customers for services rendered. That is all. It is threefold in discussion but it is single in substance. The district obtains and the company yields its plant, its structure; but it is the structure as being used, with the right to use it as stated; no less, no more. We apprehend that some difficulty in discussion has arisen from attempting to differentiate in logic what is inseparable in fact. The property taken is a single thing, to which belong certain characteristics which affect its value. The thing can not be taken without these characteristics. If it is attempted to value the thing separate from its inherent characteristics, elements which add value to the thing are omitted. If these elements are omitted the owner fails to receive the full and fair value of the thing, and thereby is denied just compensation."

Omaha *v.* Omaha Water Co., 218 U. S., 180. The city of Omaha, under a franchise granted to the water company, had the right to elect to purchase the plant within a certain time. The appraisers of the plant fixed its total value at $6,263,295.45. As a part of this value they allowed for going value the sum of $562,712.45. This item was objected to as improper. The court said:

"The option to purchase excluded any value on account of unexpired franchise; but it did not limit the value to the bare bones of the plant, its physical properties, such as its lands, its machinery, its water pipes or settling reservoirs, nor to what it would take to reproduce each of its physical features. The value in equity and justice must include whatever is contributed by the fact of the connection of the items making a complete and operating plant. The difference between a dead plant and a live one is a real value and is independent of any franchise to go on or any mere good will as between such a plant and its customers. That kind of good will, as suggested in Willcox *v.* Consolidated Gas Co. (212 U. S., 19), is of little or no commercial value when the business is, as here, a natural monopoly, with which the customers must deal, whether they will or not. That there is a difference between even the cost of duplication, less depreciation, of the elements making up the water company plant and the commercial value of the business as a going concern is evident. Such an allowance was upheld in National Waterworks Co. *v.* Kansas City (62 Fed. Rep., 853), where the opinion was by Mr. Justice Brewer. We can add nothing to the reasoning of the learned justice and shall not try to. That case has been approved and followed in Gloucester Water Co. *v.* Gloucester (179 Mass., 365), and Norwich Gas Co. *v.* City of Norwich (76 Conn., 545). No such question was considered in either Knoxville *v.* Knoxville Water Co. (212 U. S., 1), or in Wilcox *v.* Consolidated Gas Co. (212 U. S., 19). Both

cases were rate cases and did not concern the ascertainment of value under contracts of sale."

Gloucester Water Supply Co. *v.* City of Gloucester (179 Mass., 365) is an interesting case, because it presents a close analogy to the situation which would arise in the taking over of the property of the lessee by the United States under the Ferris bill. The above case was one which arose on the purchase of the property of the water company by the city under a statute which provided that in case of purchase the city "shall pay to said company the fair value thereof, such value to be estimated without enhancement on account of future earning capacity or future good will or on account of the franchise of said company." An allowance was made for going value. If the statute had provided that no allowance should be made for any intangible element, obviously going value would have been excluded. The court said:

"It is plain that the real commercial market value of the property of the water company is, or may be, in fact, greater 'than the cost of reproduction, less depreciation, of the different features of the physical plant. Take, for example, a manufacturing plant. Suppose one manufacturing plant has been established for some 10 years and is doing a good business and is sold as a going concern. It will sell for more on the market than a similar plant reproduced physically would sell for immediately on its completion, before it had acquired any business. National Waterworks of New York *v.* Kansas City (10 C. C. A., 653; 62 Fed., 853; 27 U. S. App., 165). We think it is plain that there is nothing in the provisions of section 16 of the act in question (St. 1895, c. 451) forbidding the commissioners considering this element of value, which, as we have seen, in fact exists. The provisions of the act are that the 'fair value shall be estimated without enhancement on account of future earning capacity or future good will or on account of the franchise of said company.' Whether this will allow present earning capacity and present good will, apart from the franchise, to be taken into account, as distinguished from future earning capacity and future good will, need not be considered. It is plain that the element of value which comes from the fact that the property is sold as a going concern, in which case it has, or may have, in fact, a greater market value than the same property reproduced in its physical features, is not excluded from consideration by that provision of the statute. It is also plain that the commissioners in allowing the $75,000 allowed by them in addition to the cost of reproduction, less depreciation, of the plant in its physical features, did not go beyond this. They state that, in their opinion, 'the cost of duplication, less depreciation, of the different features of the physical plant * * * does not represent a fair valuation of this plant, welded together, not only fit and prepared to do business, but having brought that business into such a condition that there is an enhanced value created thereby, so that the city in purchasing it, without considering its income or right to do business, but having the power to carry it on on its own account, should pay more for the property as such than as if this consideration did not obtain."

The amount allowed for going value in the above case was over 14 per cent of the value of the other property of the company.

See also the following decisions of the courts:

C., C., C. & St. Louis Ry. Co. *v.* Backus (154 U. S., 439); National Water Works Co *v.* Kansas City (62 Fed., 853); Des Moines Gas Co. *v.* City of Des Moines (199 Fed., 204); Pioneer Tel. & Tel. Co. *v.* Westenhaver (118 Pac., 354; Okla., Jan., 1911); Public Service Gas Co., Passaic Div. *v.* Board Pub. Utility Comrs. (87 Atl. (N. J.) 651, decided July 1, 1913).

Going value has been allowed in the following decisions of public-service commissions:

Wisconsin.—In re Cashton Light & Power Co. (3 W. R. C. R., 67); Hill *v.* Antigo Water Works Co. (3 W. R. C. R., 623); Menominee & Marinette Light & Trac. Co. (3 W. R. C. R., 778); Payne et al. *v.* Wisconsin Telephone Co. (4 W. R. C. R., 60); State Journal Printing Co. *v.* Madison Gas & Elec. Co. (4 W. R. C. R., 501); In re Fond du Lac Water Co. (5 W. R. C. R., 482); City of Racine *v.* Racine Gas Light Co. (5 W. R. C. R., 228); In re Manitowoc Water Works Co. (7 W. R. C. R., 71); City of Beloit *v.* Beloit Water, Gas & Elec. Co. (7 W. R. C. R. 187); Superior Commercial Club *v.* Superior St. Ry. Co. (12 W. R. C. R., 1); City of Milwaukee *v.* Milwaukee Gas Light Co. (12 W. R. C. R., 441).

Kansas.—In re Complaint of the Parsons Ry. & Light Co. *v.* City of Parsons, decided by the Kansas Utility Commission November 1, 1912

Michigan.—In the matter of the Application of the Northern Michigan Power Co. for authority to issue stocks and bonds, decided by the Michigan Railroad Commission June 11, 1913.

New Jersey.—Public Service Gas. Co., Passaic Division, decided by the Board of Public Utility Commissioners of New Jersey, December 26, 1912.

California.—Palo Alto *v.* Palo Alto Gas Co., decided March 12, 1913, being case No. 499.

Submitted herewith is a recent decision of the Court of Appeals of the State of New York in the case of the People of the State of New York ex rel. Kings County Lighting Company *v.* Wilcox, et al., which deals comprehensively with the question of going value.

The foregoing discussion is not intended to be exhaustive but rather suggestive, for a textbook could be written on the subject. The purpose of the writer is merely to call the attention of those having in charge this important legislation to the justice and necessity of making an allowance for those values commonly known as "overhead" or "intangible," but which nevertheless have an actual and tangible basis, in order that legislation when enacted by Congress shall accomplish the purpose for which it is designed, namely, the encouragement of water-power development. The provisions of section 5 excluding intangible elements, would and should result in continuing the present stagnation in the water-power industry.

[Court of Appeals, State of New York. The People of the State of New York ex rel. Kings County Lighting Co., Respondent, *v.* William R. Wilcox, William McCarroll, Milo R. Maltbie, John E. Eustis, and J. Sergeant Cram, composing and constituting the Public Service Commission of the State of New York for the First District, Appellants. Decided Mar. 24, 1914.]

OPINION.

Appeal, by permission, from an order of the appellate division of the supreme court in the first judicial department, made in a certiorari proceeding to review the determination of the public service commission for the first district of New York, in fixing the maximum rate for gas to be charged by the relator in the 30th ward of the Borough of Brooklyn.

The relator was organized in 1904 and merged with the Kings County Gas & Illuminating Co., which was organized in 1889 and began supplying gas in October, 1891.

The appellate division held that the determination of the commission was wrong in three respects, which are presented by four questions certified for review, viz:

(1) Was the relator entitled, upon the facts shown in the record, to have the commission make an allowance for going value in determining the value of the relator's property used in the public service?

(2) Was the relator entitled, upon the facts shown in the record, to have the cost of reproduction of paving now in the streets but not in place at the time the mains were laid, allowed for in ascertaining the value of its property used in the public service?

(3) Was the relator entitled, upon the facts shown in the record, to have the cost of reproduction of paving now in the streets but not in place at the time the mains were laid, allowed for in ascertaining the capital actually expended?

(4) Was the commission entitled, upon the facts shown in the record, in ascertaining the amount which should constitute a proper return, to consider as part of what accrues to the relator as gross receipts of its yearly operations the annual appreciation in the value of its land?

George S. Coleman and Oliver C. Semple for appellants.

O'Brien, Boardman & Platt (Morgan J. O'Brien, James F. Mengher, Swinburne Hale of counsel), for respondent.

MILLER, J. It is now generally recognized that "going value," as distinct from "good will," is to be considered in valuing the property of a public service corporation either for the purpose of condemnation or rate making, but there is a wide divergence of view as to how it is to be considered. The commission in this case says it was taken into account in valuing the plant as a "going" and not as a "defunct or static" concern and that it was also considered in fixing the fair rate of return. The appellate division says that there is no proof of the latter fact in the record. Thus the first question certified requires us to decide whether "going value" is to be appraised as a distinct item.

or whether it is sufficient to regard it as something vague and indefinable to be given some consideration but not enough to be estimated. The valuation of the physical property was determined by ascertaining the cost of reproduction less accrued depreciation. Preliminary and development expenses prior to operation were included, but no allowance was made for the cost of developing the business. By that method the plant was valued in a sense as a "going concern." In other words "scrap" values were not taken; but to say that that sufficiently allows for "going value" is the same as to say that "going value" is not to be taken into account. The problem is to determine what is fair to the public and the company. The public is entitled to be served at reasonable rates and the company is entitled to a fair return on its investment on the value of the property used by it in the public service. (Smyth *v.* Ames, 169 U. S. 466; San Diego Land & Town Co. *v.* National City, 174 U. S. 739; San Diego Land & Town Co. *v.* Jasper, 189 U. S. 439; Minnesota Rate Cases, 230 U. S. 352.) It would have been entitled to a return on the valuation adopted by the commission, if it had no customers, but was just ready to begin business, whereas it had a plant in operation with an established business, which every one knows takes time, labor, and money to build up.

If "going value" is capable of ascertainment, it will not do for the commission vaguely to consider it in fixing the fair rate of return. That no appreciable allowance was made in this case is shown both by the rate fixed and by the following statement in the opinion of the commission:

"It should be noted that the plant has been in operation for nearly 20 years, and it might be argued with considerable force that two decades should be sufficient for the company to recoup its early deficiencies below a fair rate of return, if any such deficiencies ever existed. If the company has not recouped itself by this time, under such circumstances it is doubtful whether the present consumers ought to be burdened for this reason."

The first question certified then resolves itself into two heads: 1. Is "going value" a distinct item to be appraised and included in the base upon which the fair return is computed? 2. Was the evidence in this case sufficient to justify an allowance for it?

The opinion of Mr. Justice Clarke below saves me the necessity of citing and analyzing the cases bearing on the first branch of the question. We concur fully in what he has said on the subject and his conclusion that there is no "logical difference between allowing 'going value' in the valuation of a plant when it is to be taken entirely by the public and allowing the same element when valuing the same plant for rate making purposes." A case since decided should be added to the rate cases cited by him in which "going value" has been allowed, i. e., Public Service Gas Co. *v.* Board of Commissioners (87 Atl, Rep. (N. J.), 651).

It is no answer to say that in condemnation cases the exchange value is taken, and that that depends on the rates charged, the thing to be determined in rate cases. Of course a rule of valuation might be adopted in a condemnation case which would not work in a rate case; but if the cost of reproduction less depreciation rule be adopted, as appears to have been done in National Waterworks Co. *v.* Kansas City (62 Fed. Rep., 853) and City of Omaha *v.* Omaha Water Co. (218 U. S., 180), the leading condemnation cases in the Federal courts in which "going value" was considered, it is impossible to see why the "going value" could not be determined in both classes of cases in precisely the same way.

The difficulty of determining the "going value" will not justify the disregarding of it. Rate making is difficult. But that will not justify confiscation. The difficulty, however, will lessen, as it does in most cases, when we cease to think about the subject vaguely. What then, is "going value," and how is it to be appraised?

It takes time to put a new enterprise of any magnitude on its feet, after the construction work has been finished. Mistakes of construction have to be corrected. Substitutions have to be made. Economies have to be studied. Experiments have to be made, which sometimes turn out to be useless. An organization has to be perfected. Business has to be solicited and advertised for. In the case of a gas company, gratuitous work has to be done, such as selling appliances at less than a fair profit and demonstrating new devices to induce consumption of gas and to educate the public up to the maximum point of consumption. None of those things is reflected in the value of the physical property, unless, of course, exchange value be taken, which is not admissible in a rate case. The company starts out with the "bare bones" of the plant, to borrow Mr. Justice

Lurton's phrase in the Omaha Water Works case (supra). By the expenditure of time, labor, and money it coordinates those bones into an efficient working organism and acquires a paying business. The proper and reasonable cost of doing that, whether included in operating expenses or not, is as much a part of the investment of the company as the cost of the physical property.

The investors in a new enterprise have to be satisfied, as a rule, with meager or no returns while the business is being built up. In a business subject only to the natural laws of trade they expect to make up for the early lean years by large profits later. In a business classified among public callings the rate-making power must allow for the losses during the lean years, or their rate will be confiscatory, and, of course, will drive investors from the field. In the former class the value of the established business is a part of the "good will" and may be determined by taking a given number of years' purchase of the profits, or exchange value may be considered. In the latter case a different rule must be adopted.

Referring again to the Ames case (supra), the public is entitled to be served at reasonable rates, and the corporation is entitled to a fair return on the property used by it in the public service, no more, no less, always assuming, of course, that the return is computed on a proper valuation. That was not made so by statute, but was the rule at common law, which justifies legislatures and commissions in fixing rates. If, then, a public service corporation has received more or less than a fair return it has received more or less, as the case may be, than was its due, irrespective of whether a rate had been fixed by public authority. If a deficiency in the fair return in the early years was due to losses or expenditures which were reasonably necessary and proper in developing efficiency and economy of operation and in establishing a business, it should be made up by the returns in later years. If there was a fair return from the start the corporation has received all it was entitled to, irrespective of how much of the earnings may have been diverted to the building up of the business.

To view the matter in another aspect, take the case of a public service corporation with a plant constructed just ready to serve the public. It is going to take time and cost money to develop the highest efficiency of the plant and to establish the business. Three courses seem to be open with respect to rate making, viz: (1) To charge rates from the start sufficient to make a fair return to the investor and to pay the development expenses from earnings, a course likely to result in prohibitive rates, except under rare and favorable circumstances; (2) to treat the development expenses as a loss to be recouped out of earnings, but to be spread over a number of years; in other words, as a debt to be amortized, that involves complications, but would seem to be fairer to the public and certainly more practical than the first; (3) to treat the development expenses, whether paid from earnings or not, as a part of the capital account for the purpose of fixing the charge to the public. The last course would seem to be fairest to both the public and the company, as well as the most practical.

It may be, as is urged, that a well-conducted enterprise will charge the cost of developing the business to operating expenses, and that it would open the door to an overissue of securities to permit the capitalization of early losses. In answer, it is sufficient to say that we are dealing, not with proper methods of bookkeeping, not with the proper capitalization upon which to issue securities, but solely with the fair return which the company is entitled to receive from the public. Treating a reasonably necessary and proper outlay in building up a business as an investment for the purpose of determining the fair rate of return to be charged is far from holding that it should be treated as capital against which securities might be issued.

We do not say as matter of law that the third course above outlined should be adopted as an original proposition. That may present a question of economics, depending on the particular conditions involved. The commission in this case had to determine the rate to be charged, not by a new company with no business, but by an old company with an established business. The first question, therefore, to determine on this branch of the case was whether the company had already received a fair return on its investment. If it had received such return from the start, or if in later years it had received more than a fair return, the public would already have borne the expense of establishing the business in whole or in part, and to that extent the question of "going value" for the purpose of fixing a present rate would be eliminated; for it must constantly be kept in mind in dealing with this problem that the company is entitled to a fair return and no more. If it has already had it, that is the end of the matter. If it did not receive a fair return in the early years owing to

the establishment of the business, a subsequent rate must allow for that loss or it will be confiscatory. Now, no dividends appear to have been paid by the original company or by the relator prior to 1907. Assuming a reasonable need of the service from the start, and that the failure to pay dividends was not due to bad management, an accumulation of a surplus or undivided profits, the investment of earning in permanent additions or betterments allowed for in the structural valuation, or to other causes beside those under consideration, none of which is asserted, it would seem plain that "going value" was an element in this case which the commission was required to determine in making an appraisement on which to compute the fair return to which the company is entitled.

It is urged that an unprofitable business will thus have a greater value for rate-making purposes than one profitable from the start. That again overlooks the fundamental consideration that a public-service corporation is entitled to a fair rate of return from the beginning of its investment and no more. If the shareholders have been deprived of a fair return on their investment because of the time and expense reasonably and properly required to build up the business, they have, to the extent of that deprivation, added to their original investment and are entitled to a return upon it. If, however, a fair return in addition to the expense of building up the business has been earned from the start, the public, not the shareholders, have paid the development expenses. We are dealing, not with exchange values, but with the value upon which the company is entitled to earn a return. In this connection it is to be observed that the statements in the opinions of the courts, in reference to computing the fair rate of return on present values, have for the most part been made in cases in which the precise question under consideration was not directly involved, and in which no attempt was made to limit the elements composing the problem. Manifestly, a rate computed on the cost to-day of reproducing the bare plant would not be fair. Experience is proverbially expensive. With the advantage of that experience the same or an equally efficient plant could be constructed to-day at a cost much below the actual and necessary investment of the company in both plant and experience. Indeed, wholly apart from the intangible thing called the going business, the reproductive value to-day of the physical property would not necessarily include the actual and legitimate investment in tangible property which may have been entirely replaced, not because of depreciation, but to meet advances in mechanical science, new conditions, and increasing demands not reasonably to have been foreseen at the start. I am not now speaking of replacements made with fresh capital, about which there is no question in this case. The term "going value," though not exactly defined, has been used quite generally to comprise the elements not included in the structural value of the property in its present condition. The term is not important. The point is that in some manner and under some appropriate heading a due allowance must be made for the investment in those elements. No inflexible rule will in the long run be just both to the public and the corporation. The right to limit the corporation to a fair return fixed by public authority necessarily involves the correlative right in the corporation to be assured of that fair return during all the time that its capital is employed in the public service. The statute governing this case (Public-Service Commissions Law, Cons. Laws, ch. 40, section 72) provides:

"In determining the price to be charged for gas * * * the commission may consider all facts which in its judgment have any bearing upon a proper determination of the question although not set forth in the complaint and not within the allegations contained therein, with due regard among other things to a reasonable average return upon capital actually expended and to the necessity of making reservations out of income for surplus and contingencies."

Of course, a reasonable need for the service from the start and reasonably good management are assumed. While, within reasonable limits, service may be provided for anticipated needs, a company should not construct a plant in a wilderness and, after a city has been built around it, expect to recoup its losses while waiting, nor should it expect to recoup losses from bad management. I do not include in the latter mere mistakes or errors in judgment which are almost inevitable in the early stages of any business. The fair return is to be computed on the actual investment, not on an overissue of securities, and the failure to pay dividends to the investors must be due to the causes under consideration, not to an accumulation of a surplus or to expenditures for permanent additions or betterments, which are included in the appraisal of the physical property; in other words, the actual net earnings are to be taken.

Making proper allowance for the matters just considered and perhaps for others which do not now occur to me, I define "going value" for rate purposes as involved in this case to be the amount equal to the deficiency of net earnings below a fair return on the actual investment due solely to the time and expenditures reasonably necessary and proper to the development of the business and property to its present stage, and not comprised in the valuation of the physical property.

It may be conceded that going value has no existence apart from tangible property and that commercially there is but one value, that of the property as a whole, but as the rate can not be made to depend upon the exchange value, which would in turn depend upon the rate, it would seem to be necessary to appraise the physical property and the going value separately, and, of course, that is the case if the cost of reproduction rule be adopted.

It remains to consider how "going value" is to be appraised. That presents a question of fact, the determination of which is primarily within the province of the rate-making body. It is proper for this court, however, to indicate a permissible method or methods, as in People ex rel. Jamaica W. S. Co. v. State Board of Tax Comrs. (196 N. Y., 39) it indicated a rule for valuing a special franchise for taxing purposes, which has generally been followed.

Obviously, the most satisfactory method is to show the actual experience of the company, the original investment, its earnings from the start, the time actually required and expenses incurred in building up the business, all expenditures not reflected by the present condition of the physical property, the extent to which bad management or other causes prevented or depleted earnings, and any other facts bearing on the question, keeping in mind that the ultimate fact to be determined is not the amount of the expenditures, but the deficiency in the fair return to the investors due to the causes under consideration. The business in this case was 20 years old, the books of the old company were not available, and it is, of course, problematical whether, if produced, they would have shown the necessary facts. The question, therefore, had to be determined, as all questions of fact have to be, by the best evidence available. Here I may repeat that mere difficulty in the proof would not justify a confiscatory rate. The value of the physical property was shown by opinion evidence as to the cost of reproduction. The same kind of evidence was given by two witnesses for the relator as to the cost of building up the business to its present state. In the appellants' brief it is said that they were men "of mature age and much experience." One witness said that $30 a meter was an arbitrary sum usually adopted by engineers as the cost of building up such a business, and he puts the cost in this case at $600,000. Another witness estimated the "going value" to be $781,916. He explained at length how he arrived at that figure. He assumed the existence of two plants, situated exactly alike in the same community and with the same physical property; 1, the actual plant with its established business; 2, a suppositional plant with no business. He then estimated the length of time and expense required by the second plant to develop its business to the stage and revenue of the actual plant. There would appear to be as good ground for admitting the opinion of a qualified expert on such a subject as on the cost to reproduce the physical property. Of course, the commission was not bound by that evidence. It had in addition the experience of the relator and its predecessor as to payment of dividends, the amount of capitalization of both, and the value of the physical property in its present condition determined as above stated. With nothing opposed to those facts and the opinion evidence it was not justified in ignoring the evidence of "going value" or of merely attaching some inappreciable importance to it. (See Bonbright v. Geary, 210 Fed. Rep., 44, 54, 56.) The first question certified must be answered in the affirmative.

Upon the next two questions we disagree with the learned appellate division.

In determining the cost of reproduction the commission allowed $12,717 as the cost of restoring the pavement as it existed when the mains and service pipes were laid in the streets. The relator claimed an allowance of at least $200,000 for the cost of restoring pavements subsequently laid on the theory that that cost would have to be incurred if the mains were to be laid to-day. But the new pavements in fact added nothing to the property of the relator. Its mains were as serviceable and intrinsically as valuable before as after the new pavements were laid. The controlling considerations under the preceding point also determine this. The rights of the public are not to be ignored. The question has a double aspect. What will be fair to the public as well as to the relator? (Smyth v. Ames, supra.) Should the public pay more for gas simply because

improved pavements have been laid at public expense? It is no answer to say that the new expensive pavements suggest improved conditions which, though adding to the value of the plant, will not, by reason the greater consumption, add to the expense per thousand feet of the gas consumed. The public are entitled to the benefit of the improved conditions, if thereby the relator is enabled to supply gas at a less rate. The relator is entitled to a fair return on its investment, not on improvements made at public expense. It is said that the mains will have to be relaid. So will the new pavements and much oftener. Both might possibly be relaid at the same time. The case is not at all parallel to the so-called unearned increment of land. That the company owns. It does not own the pavements, and the laying of them does not add to its investment or increase the cost to it of producing gas. The cost of reproduction less accrued depreciation rule seems to be the one generally employed in rate cases. But it is merely a rule of convenience and must be applied with reason. On the one hand it should not be so applied as to deprive the corporation of a fair return at all times on the reasonable, proper, and necessary investment made by it to serve the public; and on the other hand it should not be so applied as to give the corporation a return on improvements made at public expense which in no way increase the cost to it of performing that service.

The appellate division felt bound by the decision of the United States circuit court in the Consolidated Gas case (157 Fed. Rep., 849), and it is true that such an allowance was made in that case. But the United States Supreme Court held in that case (212 U. S., 19) that the rate established was not confiscatory and did not not pass on the propriety of that allowance. What was said in the opinion on the subject of present value was merely a general statement having no necessary relation to the question now under consideration.

We agree with the appellate division that annual increase, in the value of land is not income. Of course, under the rule of the Ames case (supra), land might become so valuable as to require its use for other purposes and as to make a rate based on it unfair to the public. The present is not such a case.

The first question should be answered in the affirmative, the second, third, and fourth in the negative, and the order of the appellate division, in so far as it remits the proceedings to the public-service commission, should be affirmed, without costs.

Willard Bartlett, Ch. J., Werner, Hiscock, Chase, Collin, and Cuddeback, JJ., concur.

Order affirmed, etc.

(Thereupon, as 6 o'clock p. m., the committee adjourned until to-morrow, Wednesday, Dec. 23, 1914, at 10 o'clock a. m.)

WATER-POWER BILL.

WEDNESDAY, DECEMBER 23, 1914.

COMMITTEE ON PUBLIC LANDS,
UNITED STATES SENATE,
Washington, D. C.

The committee met at 10 o'clock a. m.

Present: Senators Myers (chairman), Robinson, Smoot, Clark, Works, Norris, and Sterling.

STATEMENT OF MR. G. M. DAHL, OF NEW YORK, N. Y.—Continued.

The CHAIRMAN. You may resume, Mr. Dahl, and we will try to get along as fast as we can.

Mr. DAHL. I wish to deal this morning with the alleged concentration and control of the water powers of the United States in the hands of a few groups of interests.

Last evening in attempting to briefly discuss some considerations pertinent to the bill itself a great deal of time was occupied in endeavoring to reply to questions of some of the members of the committee, and also in colloquies between the members of the committee; and while this morning, so far as I am personally concerned, there is not the slightest objection to interrogations by any member of the committee, I believe that greater progress can be made and what I have to say can be placed before the committee more briefly and more consecutively if I am permitted to continue my statement and at its conclusion endeavor to answer any questions.

Throughout the United States, in the last few years, a great deal of publicity has been given in the newspapers and magazines to the subject of concentration and control of the water powers of the country. This important subject—important to all sections of the United States—so far as I am able to ascertain, has not been treated carefully or considered critically by any authority. The subject has been treated journalistically instead of logically and analytically. Statistics have been accumulated and grouped apparently for the purpose of creating a sensation—sensations which would be attractive in the headlines of the press and on the front pages of magazines—and apparently without any regard for the accuracy of the conclusions arrived at by this superficial and casual treatment. As a result it has come to be accepted as a truism throughout the country that there is a centralization of water-power control and that there is a so-called Water-Power Trust.

Now, at the outset, I would like to say that this is a delusion. There is no Water-Power Trust. There is no concentration or control of the developed or undeveloped water powers of the United States.

Those responsible for the circulation of this unfounded, this untrue, charge of concentration of water-power control have alleged two different and distinct kinds of control: First, it is asserted that in the various States of the Union there is a local concentration and control through the acquisition by certain groups of interests of a large percentage of the developed as well as the undeveloped water powers of

the region, and, in order to support such a charge, the developed water powers of certain States are taken and the percentage of such developed water powers owned or controlled by certain companies are given, and then those companies are grouped together in a fantastic manner, which I shall later describe. Second, in this same manner the various companies in different sections of the country are grouped together for the purpose of showing a centralization of control throughout the country and an interrelation of the various interests which it is claimed first exercise local control.

Of course, it might be granted that even though the charge of a localization of control were true, still it would not be a matter really for consideration in dealing with legislation of the kind now before you, because a great many of the States of the Union desire monopoly and not competition in water-power development for public-service purposes. A great many of the States have written into their law that there shall be no competition among public utilities without the consent of the State, and if the State of Colorado, for instance, desired and encouraged the development of water powers wholly within the State, engaged wholly in intrastate business under the control of one company, and therefore 100 per cent concentration, so long as Colorado controlled the rates and service of that company, it would seem that this is a problem solely for the consideration of the State authorities and not subject to regulation by the Congress of the United States. In this connection it might be interesting for you to know that of the 32 States in the Union which have public-service commissions, 16 of them protect existing utilities from competition in their respective fields without the consent of the State authorities.

But, as a matter of fact, there is no such control or concentration, local or national, as is alleged. This charge has been made a great many times in a great many different ways, but it was made most recently before this committee, by Mr. Pinchot, in his testimony on December 16, in which he stated that in 1911 the "10 greatest groups" had developed and under construction 1,821,000 horsepower and in 1913, 2,711,000 horsepower, an increase of 890,000 horsepower. He also said that in 1911 the "10 greatest interests" held undeveloped, 1,450,000 horsepower, which had risen to 3,500,000 horsepower in 1913, an increase of 2,050,000 horsepower in two years.

That is not correct. Those are not the facts.

Mr. Pinchot further stated that—

> In 1908 the total developed water power in the United States was, in round numbers, 5,400,000 horsepower, and in 1913 it was 7,000,000, an increase of about 33 per cent for the five-year period. In 1908 the 13 greatest groups of interests controlled a total of 1,800,000 horsepower developed and undeveloped, while in 1913 a smaller number—10—of the greatest groups of interests controlled a total of 6,300,000 horsepower developed and undeveloped, an increase of 240 per cent. Thus concentration in ownership of water power in the United States has increased in the last five years about seven times faster than power development.
>
> These figures show that instead of spending their money to develop the power sites they had the great water-power interests have been spending the money to acquire and to hold power sites undeveloped to meet not a present but a future demand. The concentrated control of the undeveloped power sites of the country appears to have been their object.

This statement is as incorrect as the preceding. It is just as unsound and just as misleading.

In his testimony before this committee Mr. Pinchot did not disclose the source of his figures and did not tell the committee how his computations were arrived at; but in his testimony before the House Committee on the Public Lands Mr. Pinchot submitted two tables supporting his claim of concentration of control of water powers and stated in connection therewith that—

> The figures I will give you are based in part on official statements of the Bureau of Corporations and in part on more recent investigations to bring these figures up to date; but they were made public last November, and, as far as I know, the actual figures have not been denied. (See p. 133 of the hearings before the House committee.)

Mr. Pinchot seems to consider that misleading figures and incorrect conclusions therefrom are transformed into veracity and accuracy by lapse of time and lack of denial. The two tables introduced by Mr. Pinchot before the House committee are found on pages 509 and 510 of the House committee hearings and under the head Exhibit E, as follows:

EXHIBIT E.

Commercial water power controlled by or under the influence of companies or groups of interests each having 50,000 horsepower or more actually developed or under construction, 1911.

[From tabulations made by Bureau of Corporations, 1911.]

Companies or groups of interests.	Developed and under construction.	Undeveloped.	Total.
General Electric interests [1]	939,115	[2] 641,600	1,580,715
Stone & Webster interests	278,067	372,350	650,417
Hydraulic Power Co. of Niagara Falls	144,000	20,000	164,000
Pacific Gas & Electric Co	118,343	100,000	218,343
Clark-Foote-Hodenpyl-Walbridge interests	104,300	158,000	262,300
Southern Power Co	101,680	104,000	205,680
Brady interests	70,600	16,200	86,800
S. Morgan Smith interests	76,550	96,000	172,550
United Missouri Power Co	65,000	.....	65,000
Telluride Power Co	[3] 56,350	21,300	77,650
Total	[4] 1,821,305	[4] 1,449,450	[4] 3,270,755

[1] Includes 84,700 horsepower also included with Stone & Webster interests and 48,000 horsepower with Clark-Foote-Hodenpyl-Walbridge interests.
[2] Includes 5,000 horsepower also included with Stone & Webster interests and 75,000 horsepower included with Clark-Foote-Hodenpyl-Walbridge interests.
[3] Includes 4,500 horsepower belonging to the Beaver River Power Co.
[4] Does not include power duplicated in General Electric, Stone & Webster, and Clark-Foote-Hodenpyl-Walbridge interests.

Commercial water power controlled by or under the influence of the large power interests or groups, 1913.

[From tabulations made by National Conservation Association, 1913.]

Groups of interests or companies.	Developed.	Undeveloped.	Total.
General Electric interests	1,164,097	1,719,800	2,883,897
Stone & Webster interests	319,200	499,000	818,200
Westinghouse-Brady interests	271,220	512,200	783,420
Byllesby interests	127,892	226,500	354,392
Clark-Hodenpyl-Walbridge interests	93,370	125,000	218,370
Hydraulic Power Co.	174,000	.....	174,000
Niagara Power Co. of Niagara Falls	118,300	.....	118,300
Pacific Gas & Electric Co	184,327	160,000	344,327
Southern Power Co.	113,480	165,000	278,480
Doherty interests	145,000	149,000	294,000
Total	2,710,886	3,556,500	6,267,386

The first of the above tables is a duplication of a tabulation found in Mr. Herbert Knox Smith's report of March 14, 1912, on page 180, and, according to Mr. Pinchot, the second table was compiled by the National Conservation Association in the same manner as Mr. Smith's table, and is merely a continuation and a bringing down to date of the conclusions of Mr. Herbert Knox Smith, made in the same way and bottomed on the same fallacies. The two foregoing tables, submitted by Mr. Pinchot, give the difference in the total of developed and undeveloped water power submitted in his testimony before this committee on December 16.

The basis, then, of all this hysteria about water-power control and the foundation and origin of the claim of water-power control is the report of Herbert Knox Smith, as Commissioner of Corporations, dated March 14, 1912. His statistics have been gladly and willingly accepted and his conclusions enthusiastically adopted without analysis and without critical consideration. Here is the genesis of the claim of water-power combination and the charge must stand or fall with the sufficiency and accuracy of the figures and conclusions submitted by Mr. Herbert Knox Smith. I desire to direct your attention to this report for a moment, and I am sure that when I have concluded you will agree with me that there is no foundation whatsoever for the extravagant conclusions arrived at by Mr. Herbert Knox Smith and repeated, amplified, and industriously circulated by Mr. Pinchot and others.

After marshaling and mobilizing his statistics, Herbert Knox Smith, on page 181 of his report, draws his conclusions therefrom as follows:

> From the foregoing table it is seen that the 10 companies or groups of companies with 50,000 developed horsepower or more control a total of 1,821,305 horsepower, developed and under construction, and that the same companies own 1,449,450 horsepower undeveloped, making a total of 3,270,755 horsepower, developed and undeveloped, that is controlled or influenced by these 10 companies and groups.

The "foregoing table" referred to is the first table submitted by Mr. Pinchot above referred to under Exhibit E, in connection with the House hearings, and of the 10 groups mentioned that denominated "General Electric interests" is the largest, with a total of 939,115 horsepower developed and under construction and a total of 641,600 horsepower undeveloped, alleged to be controlled by the "General Electric interests." In other words, of the 1,821,305 horsepower developed and under construction claimed to be controlled by 10 companies or groups of companies, the "General Electric interests" are alleged to control over 50 per cent. The other nine interests are comparatively small, varying from a minimum of 56,350 horsepower accredited to the Telluride Power Co. to a maximum of 278,067 horsepower accredited to the "Stone & Webster interests." With these smaller interests I shall not deal because it is fair to assume that the method of arriving at the desired "control" is the same as the method of arriving at the control by the "General Electric interests," and if the latter is shown to be unsound, misleading, and fallacious, the former can have no more substantial basis, and I propose to demonstrate beyond all possible controversy the absurdity of the claim that the "General Electric interests," so called, control even approximately the developed or undeveloped

energy above mentioned. Even a most casual consideration of the method by which Herbert Knox Smith builds up his charge of control of 939,115 horsepower of developed power by the so-called General Electric interests shows the superficial and misleading manner in which this subject has been treated.

Herbert Knox Smith assembles a large number of water-power companies throughout the United States, and accredits to each one of the companies a certain amount of developed and undeveloped horsepower. Whether or not the quantity of power allotted to each company is correct, I am unable to say, because I have not checked the figures. From the manner, however, in which the report is compiled I am naturally not prepared to admit the accuracy of any of the figures. But, for the sake of my argument, I assume them to be correct. Mr. Smith then mobilizes these various companies into three groups, A, B, and C. In group A he places water-power companies that are, as he says, completely controlled by General Electric companies or General Electric interests, through the holding of a majority of the common stocks, as Mr. Smith says "in all cases but two." In group B he includes those water-power companies of whose securities a portion, but considerably less than a controlling interest, is held by the General Electric companies, and some of whose officers or directors are also officers or directors of the General Electric companies "*or are in some way connected with interests allied with the General Electric Co.*" In group C he includes water-power companies among whose officers and directors are individuals who are also officers or directors of the "General Electric companies," or who are in some way connected with interests allied with the General Electric Co., "but are not connected by the corporate ownership of securities." The foregoing description of the method of grouping these companies into these three groups—A, B, and C—is taken from page 144 of Mr. Smith's report. As stated, in group A he has placed certain companies in which he says the General Electric interests have absolute control—that is, have the control of a majority of the stock, except in two cases—and therefore have, of course, control of the corporate affairs of the various companies. The total of the developed water power controlled by this group is 82,860 horsepower, so that, according to Herbert Knox Smith's own figures, the total horsepower controlled by the General Electric interests, so called, by virtue of actual stock control is 82,860 horsepower.

Senator SMOOT. Instead of nine hundred and some thousand?

Mr. DAHL. Instead of 939,115. I am coming to the others in a moment.

Then, group B on page 146 of Mr. Smith's report contains a list of companies in which the so-called General Electric interests are admitted by him not to control the stock ownership, but in which there is some slight ownership of stocks or bonds, or both, and a common directorate.

Senator CLARK. When you say "common directorate" you mean to say the directorate is the same in all the companies?

Mr. DAHL. No; I mean a single common director in some cases.

Senator CLARK. I understand what you mean, but "common directorate" would seem to indicate on the surface that the whole directorate was the same. I do not suppose you intended to convey that idea?

Mr. DAHL. Oh, no. I thank you for the correction. What I meant is one or more common directors.

In this group B are found companies, for instance, where the so-called General Electric interests own but 9.7 per cent of the bonds and there is but one common director. In speaking of the General Electric companies or General Electric interests, I want to make clear to the committee what Mr. Herbert Knox Smith has in mind and how he groups different companies into one group called "General Electric interests." The General Electric Co. has stock in three investment companies—one-half interest in Electric Bond & Share Co., the company with which I am connected; a three-fifths interest in Electrical Securities Corporation, and a one-third interest in United Electric Securities Co. These three companies own some securities in various hydroelectric companies. Mr. Herbert Knox Smith takes the ownership of these three companies in securities of water-power companies, stocks or bonds, as well as securities owned by the General Electric Co. itself, and groups them together under the term "General Electric interests" or "General Electric companies." Group B, shown by Mr. Herbert Knox Smith on page 146 of his report, gives an aggregate of 419,060 horsepower developed and under construction and 522,600 horsepower undeveloped, and these totals are carried forward by Mr. Smith into the total of 939,115 horsepower developed and under construction and the 641,600 horsepower undeveloped, being the total of the alleged control by the General Electric group, as shown on page 180 of Mr. Smith's report. I deny that the so-called General Electric interests control one single horsepower of either total in group B. I deny that the so-called General Electric interests have or exercise, or can exercise, or desire to exercise, any control whatsoever over a single one of the companies named in group B. In the list of companies found in group B there is not one company of which securities even Mr. Herbert Knox Smith himself claims the so-called General Electric interests own more than a maximum of 11.5 per cent of the common stock, 2.7 per cent of the preferred stock, and 1.9 per cent of the first-mortgage bonds. That is the maximum. The percentage of the securities owned by the so-called General Electric interests of the remaining companies named in group B dwindles to a very small percentage of the common stock and a very slight percentage of the bonds, and I think one or two illustrations of how the alleged "control" is arrived at in group B should be sufficient to once and forever demolish the absurd claim that the so-called General Electric interests control that 419,060 horsepower.

One illustration: In group B is listed the Sierra & San Francisco Power Co., with a total of 65,500 horsepower developed and 50,000 horsepower undeveloped. According to the figures shown by Mr. Herbert Knox Smith, the so-called General Electric interests own but 9.7 per cent of the bonds of the Sierra & San Francisco Power Co., and Mr. S. Z. Mitchell is shown as a director of the Sierra & San Francisco Power Co. Mr. Mitchell is, of course, a director of Electric Bond & Share Co., and is its president. There is no claim of any stock ownership and in a note to group B, Mr. Smith admits that the 9.7 per cent of bonds owned are second-mortgage bonds. So, without the ownership of any stock or any first-mortgage bonds, but merely through the ownership of 9.7 per cent of sec-

ond-mortgage bonds and the fact that Mr. Mitchell is a common director to the Sierra & San Francisco Power Co. and Electric Bond & Share Co. the conclusion is arrived at that the so-called General Electric interests control 65,500 developed and 50,000 undeveloped horsepower, owned or claimed to be owned by the Sierra & San Francisco Power Co. Now, I happen to have some slight personal knowledge of that situation, and Mr. Mitchell is here and, if necessary, can answer for himself, but I want to say to this committee that any claim of the control of this power by the so-called General Electric interests warrants the reply that such claim is absurd and ridiculous on its face. There were and are a great many other directors of the Sierra & San Francisco Power Co. and of Electric Bond & Share Co., and I know that neither Mr. Mitchell or Electric Bond & Share Co., in any sense, control or desired to control, or could control if they or either of them desired, the affairs of the Sierra & San Francisco Power Co. I know that the affairs of that company were and are controlled by the board of directors wholly independently of Mr. Mitchell, and independently of the so-called General Electric interests, and Mr. Bacon, of Ford, Bacon & Davis, who has been present at some of these hearings, and who, as I understand it, is to appear before this committee, is probably the one man who, more than any other, directs the affairs of the Sierra & San Francisco Power Co. The interests of the so-called General Electric companies in the affairs of the Sierra & San Francisco Power Co. are confined absolutely to such interest as properly and naturally follows the ownership of second-mortgage bonds. Another company in group B claimed to be "controlled" by the so-called General Electric interests is Butte Electric & Power Co. with 69,260 developed and 97,600 undeveloped horsepower. Of this company Mr. Smith himself does not claim any greater ownership of securities by the so-called General Electric interests than 6.1 per cent of second-mortgage bonds. The Northwestern Power Co. and the Great Northern Power Co. are placed together with an ownership of seven-tenths of 1 per cent of the common stock, 1.2 per cent of the preferred stock, and 1.1 per cent of the bonds. The Western Power Co. is placed in this same group with an ownership of two-tenths of 1 per cent of the common stock and 1 per cent of the preferred stock, and the Great Western Power Co. with 1.9 per cent of the bonds owned by the so-called General Electric interests. Without going further into detail, and without further analyzing the figures found in group B, it ought to be perfectly clear to any rational mind that even the wildest flight of an imagination obsessed by a vision of control and concentration should not claim that the so-called General Electric interests control the 419,060 horsepower developed, or 522,600 horsepower undeveloped—the aggregate of the companies named in group B.

Senator WORKS. Does the General Electric Co. control any of these corporations that are mentioned?

Mr. DAHL. None in group B. I am coming back to group A in a moment.

Now, Mr. Smith himself seems to agree with the conclusions which I have just presented to the committee. In other words, his report is inconsistent with itself. You can take the assertions on one page of the report and with it fairly and logically refute the conclusions

on another page. Mr. Smith himself in the discussion of group B, on page 148 of his report, says:

> The extent of the influence of the General Electric Co. in the concerns included in group B can not be precisely determined. It seems reasonable to infer, however, that where important general electric men, such as prominent officers of the General Electric Co. or one of its subsidiaries, are found among the officers or on the directorate of the water-power company the influence must be considerable. *On the other hand, the mere ownership of a small block of stock or a comparatively small amount of bonds and slight representation upon the board of directors may not indicate any considerable degree of influence.*

And yet Mr. Smith includes in his calculations and his aggregate of controlled water power the very companies covered by his foregoing description of companies where there is only a slight ownership of bonds and a slight representation upon the board of directors, and which he admits "*may not indicate any considerable degree of influence*"; and yet he publishes the conclusions contained on page 181 of his report, that the so-called General Electric interests control these companies, and that statement is scattered broadcast throughout the United States and is naturally accepted by a great many people as true because made by a Government official, and, as a result, the public generally are led to believe that there is a vast concentration and control of the water powers of the country, a concentration and control which Mr. Smith himself, by his own language, admits does not exist in the case of certain companies included in his aggregate.

Senator SMOOT. If those qualifications had been put into the public press, the story would not have been half so interesting.

Mr. DAHL. No; and if the denial had been published it would not have been half so interesting.

The next group in Herbert Knox Smith's demonstration of control of the water powers of the country is group C, which is found on pages 146 and 147 of Mr. Smith's report. The companies in this group are said by Mr. Smith to control 437,195 horsepower, developed and under construction, and 113,500 undeveloped. It will be observed that this group contains the largest aggregate amount of developed horsepower of the three groups. The total of developed horsepower attributed by Mr. Smith to the so-called General Electric interests is 939,115, and of this 437,195 is found in group C. Now, in this group Mr. Smith admits there is not a single company of whose stock or securities any one of the so-called General Electric companies owns one dollar's worth. Not one share of stock. Not one bond. And yet these companies are inserted in the list of companies controlled by the so-called General Electric companies and the water powers owned by these companies, developed and undeveloped, are, by Mr. Smith, placed in his total of water powers claimed to be controlled by the so-called General Electric interests. And why? Because there may be one common director between one of these companies and one of the so-called General Electric companies.

Senator CLARK. Not more than one?

Mr. DAHL. Not more than one. Not more than 1 in 8 out of the 10 companies listed. In 8 out of the 10 companies in group C there is 1 common director between the so-called General Electric companies and 1 of the listed companies. In 1 of the other companies of the 10 there are 2 common directors. In another one of the companies listed in group C there are three common directors, and that

company in which there are three common directors is a striking illustration to anyone familiar with the water power or public utility business of the country of the absurdity of the claim of control. That is the North American Co. Now, anybody who knows anything about the North American Co. knows who was its dominating factor until his death within the last year, namely, James Campbell, of St. Louis. No normally sound man who ever knew James Campbell would claim that he was ever controlled by anybody.

Senator CLARK. How many directors are there in that company?

Mr. DAHL. I really have not looked it up, Senator Clark; I do not know.

Mr. MITCHELL. About 15.

Mr. DAHL. So that a mere consideration of these figures presented by Mr. Smith eliminates 437,195 horsepower developed and under construction from the total of 939,115 claimed by Mr. Smith to be controlled by the so-called General Electric interests, because these so-called interests do not own one single share of stock or one dollar's worth of securities, and because in 8 out 10 companies there is but 1 common director. And, when we eliminate this 437,195 in group C, and also the 419,060 horsepower in group B, because in the latter group there are no companies of which the so-called General Electric interests have stock control, the claim of control could never be substantiated, and is even rebutted by Herbert Knox Smith himself. Speaking of group C, Mr. Herbert Knox Smith, on page 148 of his report, says:

> Group C, as shown in the table, includes water-power companies upon whose boards of directors or among whose officers are found men who occupy positions in the "General Electric companies," but none of whose securities, so far as is known to the bureau, is corporately owned by them. That General Electric men are directors presumably means that they own stock. This does not necessarily mean affiliation with the General Electric Co., but it certainly tends to make an easy way for consolidation or close affiliation.

Senator CLARK. Let me ask you this question: When you speak of control by the General Electric, do you speak entirely of control by the corporation itself, the corporation itself having the certificates?

Mr. DAHL. Oh, yes.

Senator CLARK. I am led to that inquiry because of the fact that you mentioned this common director. Now, it might have some bearing upon the question as to how much of the General Electric stock this common director held and how much of the other stock.

Mr. DAHL. That might have some bearing as to control by various numerous individuals, but the claim with which I am dealing, and the claim which has been freely made and industriously advertised through the country has not been a claim of control by a numerous group of individuals, because, you see, the minute you begin discussing groups of individuals the number is multiplied and diversified. And what these people are trying to do is to get the number down to as small a group as possible and so they build up the companies into groups, and Herbert Knox Smith's statement is that there are ten groups that control the water powers of the country and that the General Electric interests, so called, constitute one and the largest of these 10 groups. Mr. Smith emphasizes one group—the so-called General Electric interests—and he also deals with nine

other groups, but to these other nine I am now giving no consideration except to say that, presumably, they are built up in the same inaccurate and misleading manner. And, therefore, how many men there are who are interested in these various companies might be a pertinent inquiry if we were meeting that proposition, but that is not the proposition which I am now attempting to discuss. A consideration of individual holdings would, of course, result in an extensive diversity of ownership and control.

Senator CLARK. Is the General Electric stock widely distributed or held rather closely?

Mr. DAHL. It is very widely distributed, both in this country and abroad. Mr. Mitchell is here and perhaps he knows more about that than I do.

Mr. MITCHELL. I could not tell you. I know it is very widely distributed, and becoming more so all the time, and consequently the individual holdings are getting smaller all the time.

Senator WORKS. Do you know anything about how much of the stock of these various companies you are mentioning is owned by the stockholders of the General Electric Co.?

Mr. DAHL. I do not know, Senator Works.

Senator WORKS. I presume it would be very difficult to ascertain that?

Mr. DAHL. I suppose it would be quite difficult. I have not undertaken to make any inquiries of that kind because I believed that a mere consideration of the claim of control which is made by Mr. Herbert Knox Smith and Mr. Pinchot, and a slight analysis of that claim would disclose its complete fallacy.

Senator WORKS. You are not called upon to do it, but I thought if you could do so it might throw some light on the situation.

Mr. DAHL. I would be very glad to do so if I had that information.

Senator SMOOT. The result of Mr. Smith's statement is that 10 groups control 1,800,000 horsepower and of that the General Electric control somewhat over 900,000 horsepower.

Mr. DAHL. That is the statement; yes.

Senator SMOOT. But the fact appears that they control but 82,000 horsepower of the 900,000 horsepower, and of the 419,000 horsepower they own only a small percentage of the stocks?

Senator CLARK. They do not own any of the stocks.

Mr. DAHL. I will state the exact figures and get them into the record. Of the 437,195 horsepower in Herbert Knox Smith's figures, the General Electric interests, so called, own no stock or securities of any kind in any of the companies which are claimed to control this amount of power developed and under construction.

Senator CLARK. Stocks or bonds?

Mr. DAHL. Stocks or bonds. That is group C. In group B, of 419,060 horsepower developed and under construction the so-called General Electric interests own or have an interest in some of the stocks and, in some cases, some of the bonds. In some cases both stocks and bonds, but in no case in excess of 11.5 per cent of the common stock, 2.7 per cent of the preferred stock, and 1.9 per cent of the first-mortgage bonds. In group A the total horsepower alleged to

be controlled is 82,860, and as to the companies in that group, Mr. Herbert Knox Smith says:

Group A includes those water-power companies that are completely controlled by General Electric companies or General Electric interests. In all cases but two this is through the holding of a majority of their common stock. (See p. 144, Herbert Knox Smith's report.)

Now, that is not the fact to-day. Of that 82,860 horsepower, the General Electric Co., so called, actually owns stock control of but two companies, the Schenectady Power Co., with 26,000 horsepower developed and under construction, which company furnishes power for the General Electric works at Schenectady, N. Y., and the Consolidated Power & Light Co., of South Dakota, with 2,000 horsepower developed and under construction, making a total of 28,000 horsepower owned by companies of whose stock the so-called General Electric interests own a majority control. And of the remaining companies listed in Group A, the so-called General Electric interests own, in each case, less than 30 per cent of the stock.

Senator CLARK. Right there let me ask you: When you speak of control, you speak of what amounts to more than half ownership?

Mr. DAHL. Of the stock.

Senator CLARK. Of the stock?

Mr. DAHL. Yes.

Senator CLARK. As a matter of fact, would not a less amount of stock than 50 per cent usually secure the control of almost any large corporation?

Mr. DAHL. The amount of stock which would secure control of a large corporation is problematical, and opinions might very well differ. I am sure I do not know what percentage would be required. It depends upon the circumstances of each particular case. It depends somewhat upon the diversity of ownership and upon the interest which the stockholders take in the affairs of the company. If the stockholders all lived in the same community, and therefore could be easily assembled, you would require 51 per cent in order to control. So it is a difficult question to answer definitely with any accuracy.

Senator CLARK. I think, as a practical proposition, that is true. I do not know that it is important, but I think it is true that very much less than a majority of the stock interests usually controls the affairs of a large corporation.

Mr. DAHL. I think that may be so.

Senator WORKS. It often depends upon how many proxies you can get.

Mr. DAHL. Exactly so.

Senator NORRIS. In getting proxies those who already have control and hold office have a great advantage in getting the proxies, do they not, because they know the stockholders and know the addresses and where to communicate with them, and the stockholders, especially if they reside in widely scattered sections of the country, do not know each other?

Mr. DAHL. I suppose, Senator Norris, the situation is a good deal the same as it is with a public officer, a Member of Congress, for instance. The man in office has a certain advantage because he

knows the voters, knows where they are located, usually has a list of the electors and knows how the individual voter in his particular district can be best persuaded. But when the public becomes aroused and takes an intense interest in either a primary or a general election, that knowledge, on the part of the man in office is of no great avail, for an active opposition can readily acquire the same information. And the situation is very much the same with the minority stockholders of a corporation.

Senator SMOOT. And also a stockholder can get a list of the stockholders any day he wants it.

Mr. DAHL. Exactly. However, if the committee will allow me, I do not care to spend any time on the question of whether the so-called General Electric companies control 82,000 horsepower or 28,000 horsepower. According to Herbert Knox Smith's figures, the so-called General Electric group controls 82,860 horsepower out of a total of 939,115 horsepower, both figures being for water power developed and under construction, but whether it is 82,860 or 28,000, I do not care, for either figure is such a small percentage of the amount claimed and advertised. I have not even taken the trouble to check the list of common directors set forth in groups B and C. I do not know whether these lists are correct. Herbert Knox Smith's conclusions are so absolutely unfounded from the data presented by himself that, for the sake of the argument, I am quite willing to concede that the directors were as stated and that the amount of developed and undeveloped horsepower controlled by the various companies listed in groups A, B, and C were as claimed.

Now, on this question of alleged control through common directors—being in a great many instances control through a single director common to two companies—this committee has had presented to it a diagram, which was also presented to the House committee, showing a claimed interlocking relationship of various public utilities in the United States.

Senator SMOOT. It is on page 382 of the House report.

Mr. DAHL. Thank you, Senator Smoot.

This map was exhibited here at one of the hearings—I think at the second hearing. It looked bad. It looked very bad. A casual inspection of the map gave one the impression that there might be an octupus consuming the vitals of the people of the country. Now, how was this map prepared and exactly what principle was applied in making this graphic representation of alleged interlocking interests? A large number of companies are placed in one column and the same companies are repeated in the opposite column, and then a line is drawn for each director from any one company in which he is a director to the other companies in the opposite column in which he may also be a director. So that, if you take the first 10 companies in the list and assume that one man is a director in each of these 10 companies, according to the principle upon which this map was prepared, you would draw a line from the first company in the left-hand column in which he is a director to each one of the nine companies in the right-hand column in which he might also be a director, and then you would draw a line from each one of the other nine companies in the left-hand column to each one of the other nine companies in the right-hand column. This is the result of duplicating

the names of the various companies and presenting them in two columns. In other words, the artist who prepared this map would draw, in the case I put, nine lines for each company in which there might be a single common director in the other nine companies, resulting in 90 lines for one director in 10 companies. There would not be one line for each director. There would not be two lines for each director, but there would be a progression of lines for each director, increasing and depending upon the number of companies in which he might be a director.

I have had prepared a small chart showing just how this principle works, because I thought it might interest the committee to understand the inaccurate and misleading character of this so-called interconnecting directorate map. Please note that the map has printed on it the statement that "each line represents one director." That may be true as far as it goes, but it is also true that one director is represented by a great many lines. For instance, on this map appear the names of nine companies in which Mr. S. Z. Mitchell is a director. They are as follows: American Cities Co., American Gas & Electric Co., American Power & Light Co., Electric Bond & Share Co., Electric Utilities Corporation, Montana Power Co., Railroads & Power Development Co., Securties Corporation General, Utah Securities Corporation. Lines are drawn from these various companies in the left-hand column to the companies opposite so as to aggregate 72 lines for Mr. Mitchell alone, because he is a director in nine different companies.

I have here a rough drawing which gives an ocular demonstration of the principle applied in preparing this so-called interconnecting directorate map. This drawing which I have before me shows, first, two companies with one common director, and there are two lines, one from A in the left-hand column to B in the right-hand column, and one from B in the left-hand column to A in the right-hand column. The next illustration shows the application of the same principle to four companies with one common director. In such a case the author of the interlocking directorate map would draw a line from A in the left-hand column to B, C, and D in the right-hand column, and from B in the left-hand column to A, C, and D in the right-hand column, and so on, resulting in 12 lines for one individual, a director in four companies. The next illustration on this drawing shows the result of one common director in 10 companies. The companies are lined up in two columns, and one director in the 10 companies results in 90 lines, and makes a very impressive appearance of extensive interlocking connections.

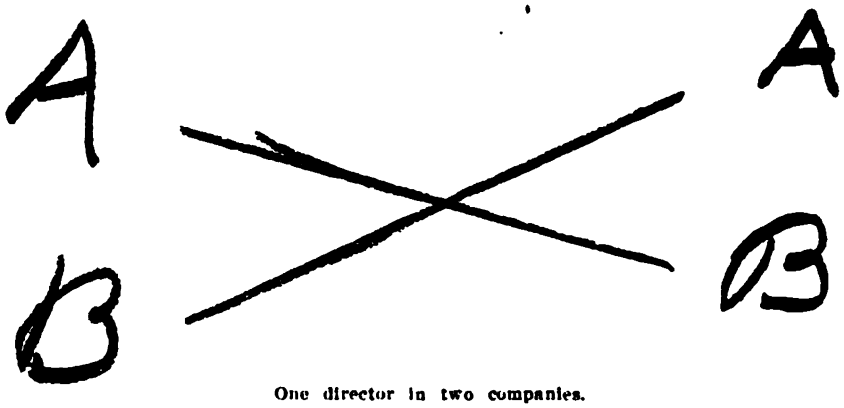
I do not think this so-called interlocking directorate map is worthy of any further time or attention. I merely wish to submit this demonstration of the extremes to which well-intentioned people may go in their efforts to bolster up and substantiate a preconceived theory which has no foundation in fact. This map, submitted at the House hearings, is a graphic representation of the optical illusion—just as Herbert Knox Smith's figures result in a mental delusion—of the tremendous control of water power in the United States.

Senator SMOOT. Do you want that to go into the record?

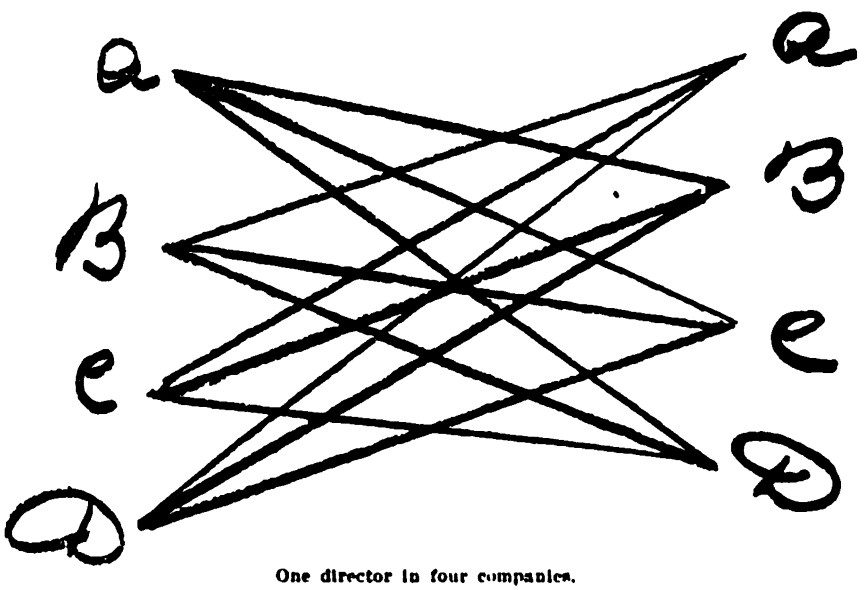
Mr. DAHL. I should be very glad to have it made a part of the proceedings.

The CHAIRMAN. That may be done.

(The map referred to is as follows:)

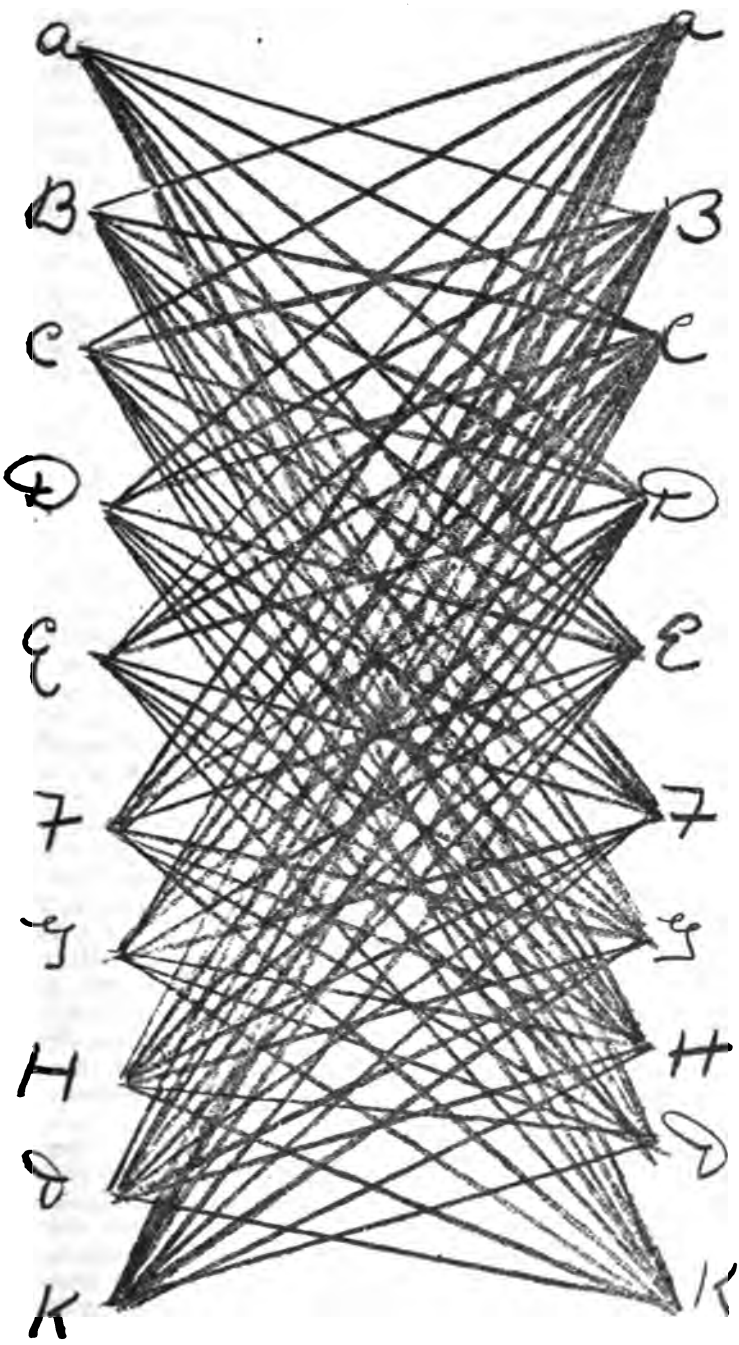


One director in two companies.



One director in four companies.

NOTE.—Illustrating the deceptive results which may be obtained by employing the method used in the chart of interconnecting directorates introduced before the House Committee on the Public Lands.



One director in 10 companies.

NOTE.—Illustrating the deceptive results which may be obtained by employing the method used in the chart of interconnecting directorates introduced before the House Committee on Public Lands.

Mr. DAHL. I think the committee may be interested in the manner in which this claim of control through one common director was called to my attention. This interconnecting directorate map found on page 382 of the House committee hearings, was shown to me shortly after its introduction before the House committee, and my informant had given the map some attention and had devoted some time with a magnifying glass to tracing the lines of control from Electric Bond & Share Co. to other companies, and, in showing me these lines of control, he said, "Here is a line of control from Electric Bond & Share Co. to American Light & Traction Co. Electric Bond & Share Co. is put down here as controlling American Light & Traction Co." I said to him "Now, that is very interesting to me. I know a little something about the business of Electric Bond & Share Co. I know that it does not own a dollar's worth of the securities of American Light & Traction Co. I know we have nothing to do with that company. I do not even know what properties American Light & Traction Co. owns, and I would like to be informed how some industrious outsider knows so much about the business of our company that he can put us down in a published record before a committee of a House of Congress as controlling the American Light & Traction Co." So I sent for a manual containing lists of the directorates of various public utilities and examined the list of directors of American Light & Traction Co., and I found there one director whom I knew to be a director of Electric Bond & Share Co. That was Benjamin Strong, jr., who is now the governor of the Federal Reserve Bank in the city of New York. He was a director of Electric Bond & Share Co. and of American Light & Traction Co. But I didn't know whether the ingenious artist who made this map concluded that Electric Bond & Share Co. controlled American Light & Traction Co., or whether American Light & Traction Co. controlled Electric Bond & Share Co., nor did I know what the rest of us 16 directors of Electric Bond & Share Co. were doing while Mr. Strong controlled us for the benefit of the American Light & Traction Co., nor did I know what the other 14 or 15 directors of the American Light & Traction Co.—however many there may be—were doing while Mr. Strong controlled it for the benefit of Electric Bond & Share Co. The ridiculous method of building up the claim of concentration and control of water powers of the United States—a claim circulated and scattered broadcast throughout the country—can not be, it seems to me, more aptly illustrated. So much for the general concentration and control of water powers.

The charge is next made that there is a control of undeveloped water powers, and one of the charges made by Mr. Pinchot before this committee—and I heard him make the same charge about a year ago before the National Conservation Congress—is that the water-power interests of the United States spend money to gobble up the undeveloped water powers and that they have spent their time, brains, and money to acquire undeveloped water powers to hold for speculative purposes. And in the figures submitted to this committee Mr. Pinchot presents the tremendous growth of the control of undeveloped water powers by these various groups of interests and deals with it in the same manner as Herbert Knox Smith, except that I do not know where Mr. Pinchot obtained his figures showing

the growth of the control of undeveloped water powers. But I do make this assertion, that it is absolutely impossible to retain control of the undeveloped water powers of the United States against the public interests, and I am very much inclined to challenge Mr. Pinchot and any of his friends to show one single undeveloped horsepower which is controlled by Electric Bond & Share Co., the General Electric Co., or any of the so-called "General Electric companies" which can be economically developed and where there is a market to be supplied by the development. I challenge him to point out one single horsepower in that situation controlled by our company. And our company is stated by Mr. Herbert Knox Smith, in his report, to be one of the most aggressive of the so-called General Electric companies. What are the facts? Why, out in Senator Smoot's State, Utah, we are interested in the Utah Power & Light Co., and that company to-day is building a development on Bear River at an expenditure of something over $1,000,000, where there is as yet no market for the power to be generated at this plant. I refer to the Oneida plant, which is located on the Bear River in Idaho, but which will have transmission lines running down to Salt Lake City. This plant will have a continuous capacity of 10,000 kilowatts, and the original installation will be, I believe, 20,000 kilowatts, and the plant will be used as a peak puller. Now, there is no market for that power at present, but we are actively trying to develop a market—we are hoping to develop a market and we are hoping to sell that power. And we are not only making that development, but we are doing it under a revocable permit issued by the Secretary of the Interior.

Now, it may very well be said, "It is claimed you can not develop under revocable permits—it is stated you can not finance such developments." That is perfectly true, but it happens that a large company with a great deal of property which it owns in fee can establish a credit and can raise money on its credit and not on the credit of the title which it has to the development, and that is the case with the Utah Power & Light Co. and the Oneida development. The money necessary for that development is not being raised by the sale of bonds against that particular development, because the company can not sell a bond on the strength of its title to the Oneida plant, but it is being raised on the credit of the people making the development. A man of large financial resources, with a revocable permit, who could not organize a company and sell bonds on the strength of his title, based upon the permit, might go to a bank and raise the necessary funds on the strength of his personal credit. And that is analogous to what is being done at Oneida.

Senator CLARK. Let me ask you this: You have gone into this subject, and do you think there is any approximately accurate way of estimating the undeveloped horsepower in the United States?

Mr. DAHL. Senator Clark, I think my opinion on that would not be worth anything. I have never gone into it with any great degree of care. There have been so many different estimates made and it requires such a combination of engineering and geological knowledge that I do not feel qualified to express an opinion.

Thinking it may be of interest to the committee, I have taken from Herbert Knox Smith's report the States in which he says these 10 groups of interests control the water-power development locally.

Mr. Smith, on page 158 of his report, gives a list of the States which he calls, I believe, "States involved in the General Electric group." His table is headed "Commercial water power, developed and under construction, in States involved in the General Electric group, the amount of power in the General Electric group, and its percentage of the total in these States." In this table he gives the control of power by the so-called General Electric interests in California, for instance, as 29.2 per cent of the total developed power in that State, and in Colorado as 71.7 per cent of the total developed power in that State. According to his figures Colorado has 69,690 horsepower developed and under construction, of which he claims the so-called General Electric group controls 50,000 horsepower, or 71.7 per cent. I have not verified his statement of the total developed power in any one of these States or that portion thereof which is owned by the companies listed in the so-called General Electric group. I have however, analyzed the method by which he builds up this group, and assuming that the General Electric Co. itself actually does own 71 per cent of the developed horsepower in the State of Colorado, what of it? It is not the ownership of the developed power; it is not the percentage of control of developed power in a State that means anything. The only significant fact—and even that may not have significance—would be the percentage of control of the total power resources of a State. Colorado, according to the figures given on page 55 of Herbert Knox Smith's report, has 2,036,000 potential horsepower, as computed by the United States Geological Survey and revised by the Bureau of Corporations. Now, one man might control all the developed water power in the State of Colorado. And it might be only 5,000 horsepower, and he would, therefore, control 100 per cent of the developed power.

And that is the principle which is applied in advertising the percentage of control of developed power in the various States in the Union. And it is given as a profound conclusion which should influence legislators in passing upon important measures. Of course, the only rational test is what percentage of the potential power of a State is controlled by any one group of interests, or by any one individual, and I have taken the liberty of copying the figures given in Herbert Knox Smith's report on page 158, showing the developed horsepower in the various States and the percentage of control thereof by the so-called General Electric interests, and then I have set opposite these figures, in another column, the estimates of the potential horsepower in the same States, found on page 55 of Mr. Smith's report, and I have had figured the percentage of that potential power which, on Mr. Smith's own figures, is stated to be the developed power controlled in these various States by the so-called General Electric interests, and the result is that in the State of California, for instance, it gets down to 1.3 per cent of the potential power of the State, and in the State of Colorado down to 2.5 per cent of the potential power of that State, and so the percentages vary down to 1 per cent in Wisconsin and five-tenths of 1 per cent in Michigan. According to Herbert Knox Smith's figures, the total commercial power developed and under construction in the United States was 2,325,757 horsepower, of which he claimed the so-called General Electric group controlled 913,115 horsepower de-

veloped and under construction, or 40.4 per cent of the total. But, taking the potential water power of the United States, as given on page 55 of Mr. Smith's report, at 45,209,000, it shows that the 939,115, even if controlled by the so-called General Electric group—and I have shown it is not—would be only 2.1 per cent of the total. I have already shown and shall show further that there is no such thing as control for speculative purposes of undeveloped horsepower. I should like to have this table, prepared as above described, incorporated as a part of the record.

(The table above referred to is as follows:)

TABLE 17.—Commercial water power, developed and under construction, in States involved in the General Electric group, the amount of power in the General Electric group, and its percentage of the total in these States.

States.	Total commercial power developed and under construction (horsepower).	Total power, General Electric group.		Potential water power as computed by the United States Geological Survey and revised by the Bureau of Corporations (p. 55, Herbert Knox Smith's report).	Per cent of control of such potential power by General Electric group according to Herbert Knox Smith's figures on p. 158 of his report.
		Horsepower.	Per cent of total.		
Total	2,325,757	939,115	40.4	45,209,000	2.1
California	429,467	125,500	29.2	9,352,000	1.3
Colorado	69,690	50,000	71.7	2,036,000	2.5
Florida	5,000	1,400	28.0	16,000	8.7
Idaho	52,100	18,000	34.5	3,080,000	.6
Illinois	38,460	1,760	4.6	414,000	.4
Iowa	151,400	60,000	39.6	458,000	13.1
Massachusetts	76,697	9,425	12.3	273,000	3.4
Michigan	102,682	1,750	1.7	352,000	.5
Minnesota	95,815	39,000	40.7	593,000	6.6
Montana	139,260	69,260	49.7	5,197,000	1.3
New Hampshire	16,450	10,000	60.8	295,000	3.4
New York	398,058	150,620	37.8	2,037,000	7.4
North Carolina	82,960	37,260	44.9	1,050,000	3.5
Oregon	95,777	55,760	58.2	7,935,000	.7
Pennsylvania	160,632	135,000	79.6	821,000	16.4
South Dakota	5,000	2,000	40.0	90,000	2.2
Washington	300,510	164,380	54.7	10,376,000	1.6
Wisconsin	96,799	8,000	8.3	804,000	1.0

[1] Herbert Knox Smith's report, p. 158.

Now, it is impossible, as I said a moment ago, for anyone to control, for speculative purposes, the undeveloped water powers of the country. The members of this committee, particularly those who reside in the western States, know that before any development can be made a water right must be obtained from the State, and, under the laws of all of the States with which I am familiar, the development must follow within a certain length of time—the development must be commenced within a certain period and completed within a certain additional period. And it is written indelibly into the constitution and laws of these western States that *beneficial use of water is the basis, the measure, and the limit of the right*, and when you stop using it you lose your right. So, I say, there can be no control of undeveloped water powers of the West for speculative purposes. The only theory on which control of undeveloped water power can be claimed is ownership of all the real estate necessary

for the development and the water right from the State, and, where public land is necessary for the development, a permit from the Federal Government, under which the project can be financed and an existing market to absorb the power. And the only theory upon which a claim could be made of control of undeveloped water power in the eastern States, where developments might be made upon or in navigable waters, would be where the company had obtained permission and authority from the Congress of the United States to construct upon or in the navigable waters and had obtained its rights from the State and had all the land necessary for the development. and, after all these rights were obtained, it would not necessarily follow that the control of such undeveloped power would be inimical to the public interests, unless also an existing market required the power and the company refused to develop. So that, I say, taking the western situation and the situation on the navigable waters in the East, and considering the rights, both State and National, prerequisite to a water power development, there is and can be in the nature of things no control of undeveloped water powers in the United States inimical to the public interest.

In dealing with the subject of common directors there is one consideration I omitted which I think very properly should be brought to the attention of this committee, and that is that the effect upon the public welfare of common directors in various companies seems to be considered in a vague and fanciful sort of a way, without any actual realization of the facts of business life. For instance, it seems to be considered as something disadvantageous to the public that Mr. Mitchell, who is president and a director of Electric Bond & Share Co., might possibly also be a director of the Pacific Gas & Electric Co., doing business on the Pacific coast, and, at the same time a director of the Mississippi River Power Co., doing business in the Mississippi Valley, although these companies are not competitive and have nothing in common except being engaged in a similar enterprise. Why should he not be a director in these two companies? Why should not the men who have spent their lives in this business and who know it from the ground up—the men who have had experience in the construction, operation, and financing of these properties—why should not these be the very men to sit on boards of directors of companies engaged in this business? What kind of men would Mr. Pinchot and Mr. Herbert Knox Smith select for the directorates of water-power companies in the United States? Do they want men who do not know a kilowatt from a handsaw? The men who have had experience and have the knowledge are exactly the kind of men who naturally in the normal development of this business are sought and should be sought and who are found, and should be found, on these boards of directors.

Senator NORRIS. Assuming that to be just as you say, don't you think that is an argument why there should be regulation?

Mr. DAHL. Not regulation except where competition might result between companies, and that depends upon the further question whether or not competition in the public utility business is desirable.

Senator NORRIS. Admitting that competition is not desirable, does not that make an additional argument why there should be regulation?

Mr. DAHL. No; I do not think so, but I do think that is a question for Congress to deal with in the broad aspects of the situation, a question applicable to all power companies, and not only power companies, but to all the business of the United States.

Senator NORRIS. That is, a system of regulation?

Mr. DAHL. But really in a matter before the Committee on Public Lands involving legislation as to water-power development on the public domain it seems to me somewhat illogical to take up the question of interlocking or interconnecting directorates, because that is not a water-power question, but it is a question involved in every business engaged in interstate commerce, and Congress has dealt with that precise question in the Clayton Act recently passed. By the terms of that act it is provided:

That from and after two years from the date of the approval of this act no person at the same time shall be a director in any two or more corporations any one of which has capital, surplus, and undivided profits aggregating more than $1,000,000, engaged in whole or in part in commerce, other than banks, banking associations, trust companies, and common carriers subject to the act to regulate commerce, approved February fourth, eighteen hundred and eighty-seven, if such corporations are or shall have been theretofore, by virtue of their business and location of operation, competitors, so that the elimination of competition by agreement between them would constitute a violation of any of the provisions of any of the antitrust laws.

Congress had this question before it in dealing with the broad business problems of the country, and these problems are thought by many to have been solved by recent congressional legislation. I say Congress had that question before it and it legislated, not against common directors generally, but against common directors between corporations competing in interstate commerce and having certain capital, surplus, and undivided profits, and then only where the elimination of competition by agreement between such companies would constitute a violation of the antitrust laws. It is thought, very properly, that the elimination of competition between interstate power companies would not constitute a violation of the antitrust laws, because such competition is not in the interests of but actually contrary to the interests of the public. Neither did Congress attempt to legislate against common directors in corporations competing in purely intrastate commerce, and very properly, because Congress, as you well know, has no jurisdiction whatever over that subject. If the State of Colorado, for instance, desires to permit common directors between competing companies engaged in intrastate business wholly within the confines of Colorado, is it not entitled to do it? Should the Congress of the United States attempt to say to the State of Colorado, "You can not have such common directors?" Should the Congress of the United States say to the State of Colorado, "You can not promote and encourage monopoly in the public-utility business in your State, where such business is wholly intrastate, if your people believe that the public interest will be thereby promoted?" I say Congress has dealt with that question just as thoroughly and as broadly as it can, and the remaining question, if any, of common directors between competing companies engaged wholly in intrastate business is solely a question for the various legislatures of the various States of the Union, and particularly is this true in view of the fact that a great many of those States have already written into their laws a prohibition against competition except with the

consent of the State authorities. The State of Wisconsin, for example, has had a public-service commission for about 10 years and during that time the utilities of that State have been protected in their existing territory against competition by new projects, and before any such competition can be initiated a certifiate that public convenience and necessity will be promoted thereby must be obtained from the public-service commission of the State of Wisconsin. And I am informed that during all that time there has not been granted one single certificate of convenience and necessity, and yet it is not claimed that the Wisconsin commission is not protecting the interests of the public. They are protecting the interests of the public, and no commission in this country is more highly considered or has greater influence. And this has been written into the law of Wisconsin, and this law has been enforced, and there is no complaint, so far as I know, with that enforcement, and there is no complaint of the lack of competition. And yet your question to me would imply that the Congress of the United States should say to the State of Wisconsin, "We don't like the way you run your intrastate business and you must run it the way we want you to."

Senator NORRIS. If you are referring to my question, I do not think that is borne out at all, if you mean the question I asked you.

Mr. DAHL. Yes, Senator Norris.

Senator NORRIS. I asked you about regulation.

Mr. DAHL. Senator Norris, I can dispose of that very quickly. I am in favor of regulation. I am in favor of regulation of every public-utility corporation engaged in business in the United States, and in every State in which we do business we welcome regulation. As a business proposition, I do not care personally whether the United States Government regulates every power company in the United States, not only its interstate business, but also its intrastate business. As a business proposition, I do not care which it is, but I do not want to be regulated twice by conflicting authorities. I want one authority to which I can go and find out what I must do, and I don't want to be placed in the position, as Judge Short remarked the other day, of probably having to go to two jails at once. I want to make my position on that point perfectly clear to you.

Senator SMOOT. And if you are regulated you want all other companies engaged in the same business to be regulated in the same way?

Mr. DAHL. Yes; I think that should be so, of course, because if another company is not regulated and my company is regulated, I am then placed at a disadvantage, competitively speaking.

Senator NORRIS. That is one of the difficulties I think all of us want to solve, as to just how to regulate. Whether it should be regulated by a Federal commission or a State commission is a very important thing for us to consider, but because a man is in favor of Federal regulation it does not necessarily mean that he must be wrong and the fellow who favors State regulation must be right, and vice versa. But there are instances, and we have them right here in this bill, as to just how far the State can go and be effective, and how far the Federal Government can go and be effective.

Mr. DAHL. Now, just briefly, one or two concluding considerations in dealing with this question of centralization and control. I want to leave this thought with the committee. The very people making this hue and cry throughout the country about concentration and control

themselves argue in favor of unification of the power business and the coupling up of power sites throughout the country. In other words, if you will take almost any address or paper of any one of those who allege great concentration and control, you will find that one page refutes the conclusions of another page, because they not only talk about the dangers of concentration and control, but they turn from that to say that in the very nature of the power business there must be a unification of development because it tends to economy and efficiency in operation and, therefore, is in the interest of the public. I want to give you one or two quotations from the testimony of some of these gentlemen. First, I desire to quote from the testimony of Mr. Gifford Pinchot before the National Waterways Commission, November 21–24, 1911, on the development and control of water power. Mr. Pinchot said:

* * * I am very strongly in favor of the consolidation of water-power plants, coupling them up over large areas. The argument made for that consolidation, in the brief submitted by Mr. Dunn, on behalf of the American Institute of Electrical Engineers, is absolutely unanswerable, and I have long held the same opinion. Better service to the community would be forthcoming if water-power companies operated over large areas. But there must be public control of their operations to prevent the benefits which come by reason of such consolidation from being translated into a general overcharge on the consumer.

EXTRACTS FROM MR. DUNN'S TESTIMONY REFERRED TO ABOVE.

It has been suggested that with the growth in extent of large hydroelectric distributing systems ultimate interconnections and combinations between them might establish a monopoly and permit the raising of prices for power. Such interconnection between contiguous hydroelectric systems offers decided and important engineering advantages. It improves constancy of electrical pressure and enables the system to draw power from two or more independent power plants.

The rainfall occurring at different times on two or more separate watersheds is thus made to benefit all of the consumers on the combined systems. Such interconnection also permits reduction in operating expenses and assures better service by reducing to a minimum the probability of total interruptions at any time from line troubles or otherwise. The investment and, consequently, the cost of power, can be reduced by combinations, because less capacity in generating machinery to serve as spare plant for emergencies need be installed, and operating expenses can be reduced by rendering repairs easier, owing to greater facilities for shutting down for work or for inspection. Any tendency toward raising the price of power as an accompaniment of such combination is restrained automatically by competition with steam power and can be regulated by Government commission.

Hon. Walter L. Fisher, in his testimony before the same commission, said:

I do not think there should be any provisions in these grants against so-called combinations or monopolies, but do believe there should be no assignment of the grant without the permission of the Government. I think hydroelectric development is essentially monopolistic and should be essentially monopolistic in its character. That is why I think it should be effectively regulated. I think they should have the advantages of the control of the market and freedom from harassing and vexatious competition if we are going to put them under the disadvantages of effective public regulation.

Mr. Herbert Knox Smith, on page 95 of his report, says:

In addition to the general tendency toward concentration in the ownership of public utilities and industrial enterprises there are, in the case of water power, special forces contributing to this end. It was pointed out in a previous

chapter (p. 90) that the highest efficiency and economy in the utilization of water power often requires the unifying of development. Such unification or "coupling up" of power developments results in concentration of ownership, or, at least, harmony in control.

The development of large water powers usually costs more than the requirements of the average manufacturer will justify as an investment for power. Consequently only the smaller sites can generally be utilized by individual manufacturing concerns. The advance of electrical science has made it possible to use power at a distance from the point of generation, and so has greatly extended the area that may be served from a given power site. These conditions have given rise to the "commercial" development and distribution of water power in the form of electricity and have made it probable that developments at most of the larger power sites must become commercial projects. The advantages of coupling up sites and the consequent enlargement of power units greatly increase the costs of a system of developments, and in most cases an aggregation of capital is necessary.

Mr. Smith says that cencentration is a good thing, and yet he spends a great deal of time and exhibits a great many figures showing as hostile to the public that concentration which, in another place, he claims to be beneficial.

Senator CLARK. He wants control of the control!

Mr. DAHL. That is something we are all in favor of, Senator Clark. We all want control of the control, and, as I said before, we hope that some method will be found by which we will not have to be controlled more than once nor by more than one authority.

I thank you.

STATEMENT OF MR. JOHN D. RYAN, PRESIDENT OF THE MONTANA POWER CO.

Senator CLARK. Mr. Ryan, before you begin, I would like to suggest this to you; of course, I do not know what your views may be, but we have had a great many criticisms of the bill and very little constructive information, and I would like some of the gentlemen here who believe that there ought to be some legislation to address themselves to the bill along that line. Most of us are not well acquainted with this power development, or anything of that sort, and I myself have been somewhat at sea. We wanted to get the best bill. This bill is presented by the Interior Department. Now, if it is not a good bill I would like any suggestion that will aid us in making it a good bill.

Mr. RYAN. Senator Clark, I am very thankful to you for suggesting that I might be able to make some constructive suggestions. I will say in advance that I am entirely in accord with your view that a good bill should be passed——

Senator CLARK. I am not saying personally that any bill should be passed.

Mr. RYAN. It is my firm conviction and belief, in the interests of the whole country and particularly of the public-land States where there are large water power developments possible, that a bill should be passed, if possible, in this Congress. And I will say in advance that from the standpoint of a water-power man, I am willing to take a bill that is not perfect; but I will say that we must have a bill under which we can work.

I am president and the largest individual owner of the Montana Power Co. My company (I will speak of it as my company) has been referred to in the reports of the Commissioner of Corporations

in the hearings before the House committee, and I do not know but what it has also been referred to in the hearings before this committee as one of the General Electric group, and I will say this to you, that the Electric Bond & Share Co., in which the General Electric Co. has an interest, owns an interest in the Montana Power Co. comparatively small. Mr. Coffin, chairman of the board of the General Electric Co., owns a personal interest in the Montana Power Co. that is comparatively small; that I and my friends and the group of men about me in the power business in Montana own 45 per cent of the total stocks of the Montana Power Co. to-day, and of that 45 per cent 35 per cent is owned by residents of the State of Montana.

To make our position clear——

Senator CLARK. Thirty-five per cent of the 45 per cent?

Mr. RYAN. Thirty-five per cent of the total stock of the corporation is owned by residents of the State of Montana.

Senator ROBINSON. Leaving 10 per cent of the total stock owned by nonresidents?

Senator CLARK. No; 65 per cent.

Senator ROBINSON. Ten per cent of the total of 45?

Senator CLARK. No.

Mr. RYAN. The organized group which I got into the power business with me we consolidated with people who are already in the business in putting our interests together and consolidating, the group that I represent, wound up, let us say, with 45 per cent of the total stock of the corporation, and out of that 45 per cent 35 per cent is owned by residents of the State of Montana. In other words, people residing outside of the State of Montana were my partners to the extent of approximately one-quarter of what we held.

Now, if you will pardon me for saying so, I think I am well qualified to speak on this subject, upon the constructive side of this subject. The Montana Power Co. owns and operates 85 per cent or more of the water power developed within the State of Montana. We have been charged with owning a very large percentage of the undeveloped powers. We do not. Our ownership of undeveloped water power, if we except powers already in active course of construction, is infinitesimal as compared with powers that are susceptible of cheap development in the State of Montana.

The State of Montana leads the States of the Union in its consumption of electric power per capita of population. That is the result of the development policy pursued by the Montana Power Co. and some of its predecessors (the Butte Electric & Power Co. and the Great Falls Power Co.) in seeking and obtaining business at a very low price in competition with high-priced coal and in developing sites that are owned in fee and without any permits or without any such conditions as people who did not own sites in fee would have had to comply with up to the present time. I do not want to be controversial; I would a great deal rather not be, but I want to answer a statement of Mr. Pinchot, on page 233 of part 4 of the report of these hearings, in which he says that the figures show that instead of spending money to develop the power sites, the great water-power interests have been spending money to acquire and hold water-power sites undeveloped, to meet not present but future demands. In other words, he says that we are holding them for speculation.

I have heard what Mr. Dahl had to say on that subject, and there has been a great deal said by others in these hearings, and I have read that; but I want to call, if I may, Mr. Pinchot's attention and the attention of this committee to the published list of the developments of the Montana Power Co., and to say that in so far as this company, which has been referred to as one of the large water-power concerns goes, we are going to prove an alibi, as far as holding sites for speculation is concerned.

I have a list here of the completed hydroelectric plants and installed capacity. It is not necessary to read them, but there are 12 completed electric hydro plants connected in the system of the Montana Power Co. and all owned by us, with a total installed capacity of 94,000 horsepower. We have steam reserve plants, the total installed capacity of which is 8,000 horsepower. Or, in other words, we have a total installed capacity of 102,000 horsepower, hydroelectric and steam. We have hydroelectric powers in the course of development at the Great Falls of the Missouri of 80,000 horsepower. That development was commenced two years ago. It is 80 per cent completed to-day. We expect to furnish power from that plant in July of next year at a total cost exceeding $5,000,000. We also have under construction a plant at Thompsons Falls on the Clarks Fork of Columbia River, of 40,000 horsepower. That development was commenced the same year that the development I last spoke of was commenced, and that development will be ready to furnish power and is under contract to deliver some power as early as the 15th of June this coming year.

Senator SMOOT. Is that on public land?

Mr. RYAN. On lands owned in fee by the company. Both of those developments are on lands owned in fee by the company. There also have been added to the plants of the company this year a total of 6,930 horsepower in additional units at existing developments, and there is partly constructed on the Missouri River another development that will reach 40,000 horsepower when completed, and on which approximately three-quarters of a million dollars has been spent, but upon which work has been suspended. One of the principal reasons for this work having been stopped is that there is some Government land that will be floded by the dam when it is completed, and up to the present time, of course, we could obtain nothing but a revocable permit under which we could proceed, and while we could develop to better advantage at the point where that dam is located on account of its partial completion, we find that our securities sell better, we are able to get a better price for them, we are able to sell them more freely in times like these if there is not any question at all involved as to our rights to our dam site and to the lands we flood.

Senator CLARK. Out of personal curiosity, may I ask a question in connection with that list of improvements of yours; this Great Falls project which you say you own in fee, do you know who was the original owner of that land?

Mr. RYAN. I do not know who took title from the Government, Senator Clark, but the Great Falls Power Co., which is a subsidiary of the Montana Power Co. and owned entirely by it, except the qualifying director's shares, and which is the successor to the Great Falls Water Power & Town Site Co., a company that was organ-

BUTTE ANACONDA AND PACIFIC RAILWAY - SILVER BOW CANYON FREIGHT TRAIN, 22 CARS, TOTAL WEIGHT
[illegible] TWO 90 TON ELECTRIC LOCOMOTIVE

ized in 1888 or 1889 to develop the water powers on the Missouri River and to lay out the town site of Great Falls. It was controlled by Mr. James J. Hill and the Great Northern interests for 20 years. But in 1908 Mr. Hill and I had some negotiations on another subject. He said, "You are in the power business." I owned, with one other partner, the electric-lighting and street-railway business in the city of Great Falls, and had been trying to induce Mr. Hill to develop more power for our use. He said, "You are in the power business, and I am an old man and I have too much to do, and the country needs this development. You can do more with it than anybody else, and if you will buy it I will sell it to you." And I bought it from him in 15 minutes, sitting across the table, although I did not have any idea where I was going to get the money. The fee to those lands passed from the Government 20 years before that time. They were held, as I say, by the predecessor of the Great Falls Power Co. (the present owner), and only one small development was made, and that was to supply a smelter built at Great Falls in 1890 or 1889 with power, and the water was sold. It was not a hydroelectric power. In those days there was not any such thing as long-distance transmission, and the power had to be used practically at the site.

Senator NORRIS. That is fully developed now, is it not?

Mr. RYAN. It is about 60 per cent developed.

Senator NORRIS. There are improvements still going on?

Mr. RYAN. There are two more powers along this stretch of land owned by that company that can be developed and furnish 90,000 horsepower.

Senator NORRIS. When it is fully completed?

Mr. RYAN. No. When it is fully completed the Great Falls group of powers which we control will make a total of 240,000 or 250,000 horsepower.

Senator NORRIS. Was that an exceptional proposition there?

Mr. RYAN. It was a very cheap proposition.

Senator NORRIS. How far did the water naturally fall there?

Mr. RYAN. The water falls something like 450 feet in 9 miles.

Senator NORRIS. How many dams did you build?

Mr. RYAN. With the one now under construction and which will be completed early next spring we will have three dams completed.

Senator NORRIS. From that you supply power to operate the street railways?

Mr. RYAN. From that we supply power to operate everything in the city of Great Falls. We transmit it for 135 miles to Butte, and we are selling it for mining uses, industrial uses, and we transmit it 160 miles to Anaconda for the use of the smelter.

Senator NORRIS. I have heard a great deal and read a great deal about that, and I have a great deal of interest in connection with that. The power is developed right at the city?

Mr. RYAN. The power is developed from the city to a distance of 9 miles below.

Senator NORRIS. Can you tell us what the consumer in Great Falls pays for electric light, for instance, in the residence?

Mr. RYAN. The consumer in Great Falls pays a maximum of 9 cents a kilowatt hour, and the price of power in Great Falls to the industries in Great Falls drops from 9 cents a kilowatt

hour to the smallest consumer to $20 per horsepower year to the large consumer. The city of Great Falls pays $25 per horsepower year for its current to operate the pumps. The city pumps water for its own use from the river by electric pumps and pays our company $25 per horsepower year for doing it.

Senator NORRIS. If you reduce that to kilowatt, now, what would they be paying?

Mr. RYAN. The city would be paying virtually $35—$33 or $34 per kilowatt year, or about a half a cent a kilowatt hour.

Senator NORRIS. Take in the residence district for people using electric light; what do they pay per kilowatt hour?

Mr. RYAN. Commencing with 9 cents per kilowatt hour. But the city and industries use the power for 24 hours a day. In other words, they use 90 per cent of all the power set aside for them.

Senator NORRIS. Oh, yes; I understand.

Mr. RYAN. And the amount the resident uses is about 5 per cent of the amount set aside for him.

Senator NORRIS. I understand that, but what I want to get at is what he actually pays.

Mr. RYAN. He actually pays a maximum of 9 cents a kilowatt hour on a minimum consumption.

Senator NORRIS. Nine cents, on a minimum consumption?

Mr. RYAN. Yes.

Senator NORRIS. Take the ordinary resident.

Mr. RYAN. The ordinary resident would probably pay somewhere around 7½ or 8 cents per kilowatt hour. But you understand, Senator, of course, he uses it for only one or two or, perhaps at most, three hours a day——

Senator NORRIS. Oh, yes; I understand that. I just want to get at what the facts are.

Mr. RYAN (continuing). And the equipment, machinery, and water are there all the time.

Senator NORRIS. I know. Of course, he ought to pay a larger proportion than the man who takes it for 24 hours a day. There is not any doubt about that.

Mr. RYAN. Now, following my argument, Mr. Pinchot was wrong when he included our concern, at least, although he did not name it, he included it with the rest of the group, as among those having undeveloped powers for the purpose of speculation. And I will add, speaking of hydroelectric powers alone and leading out with mine, we have 94,000 horsepower installed capacity now. We have 166,930 horsepower in course of development, or 260,930 installed and in course of development. We also hold sites undeveloped, and here is a printed circular advertising the bonds of this company, and putting our best foot forward, as to what we own, in order to be able to sell our bonds to the best advantage; and we have undeveloped 86,800 horsepower, or less than 33⅓ per cent of what he have already developed and what is in course of development, and which will be finished this year.

I am not going to dwell any longer on that point, but only want to refute the charge, so far as my company is concerned, that we hold powers for speculation. And, furthermore, I want to say that a man in my State who would hold the powers for speculation ought to have a guardian appointed for him. There is more water

power in the State of Montana than can be developed and used to advantage in the lifetime of anybody who is sitting around this table. On the Madison River 20,000 horsepower can be developed every 5 miles for a distance of 50 miles. On Clarks Forks of the Columbia River we have just developed 40,000 horsepower. We will finish this year a development of 40,000 horsepower at a natural falls, and I have in my pocket a prospectus of an enterprising citizen of Montana who is in New York to-day endeavoring to raise money to get a development of 117,000 horsepower within 10 miles of our dam on the same stream.

Now, the possibility of controlling or of monopolizing power in the mountain States, such as Montana, where the headwaters of the Mississippi or Missouri and the headwaters of the Columbia rise in the middle of the State and flow out of it and drop five, six, or seven thousand feet in going out of the State, there is no possibility of monopoly. Anybody can get all the power he wants, and all he needs to enable him to develop it is to get a satisfactory power so that he can raise the money and get a satisfactory market so that he can deliver the power when it is finished.

Senator CLARK. Has there been any approximate estimate of the possible undeveloped water powers in Montana?

Mr. RYAN. There has, but I do not remember the figures.

Mr. DAHL. It is on this sheet, Senator Clark.

Mr. RYAN. What I want to say to you is, if there is a monopoly of power in the State of Montana or in any other State, in my opinion, the public-land States, it is only for one of two reasons: First, that the power can not be developed under existing laws to advantage—power that has to be developed on Government land; and second, that the money can not be raised to develop it. If there is any monopoly it is a monopoly of the market.

My company, furnishing 85 per cent of the hydroelectric power made in the State of Montana, might be called a monopoly. But if we have any monopoly, it is only a monopoly of the market. And let me tell you that that monopoly was acquired in this way: When I took over these Great Falls powers and looked into the question of developing a market for them, I found the mines of Butte and the smelters of Anaconda were using steam power. They had some electric power, but not much. They were using steam power to the extent of about 35,000 horsepower. That was costing them an average of $85 per horsepower.

Senator SMOOT. A year?

Mr. RYAN. Per year. The lowest single cost at any one plant of those companies was at Anaconda, where they had a uniform load and a large load; and the lowest cost for any one year that they operated was something over $66, and it ran from that up to $125 and $130 for isolated mines where it was expensive to get fuel and hard to reach. We made one contract for electric power to be delivered from our dam at Great Falls, 130 miles away, and took over all of that business on a contract for the life of the mines for $30 a horsepower year. In other words, we saved on 35,000 horsepower to that mining company at one swoop $55 a horsepower. If you can calculate that quickly in your minds, you will see we enable that mining company to carry on its mining operations for $2,000,000 less money than it could have done without our power. In other words, we

mine about 4,000,000 tons of ore a year in the mines. We make every ton of ore worth 50 cents more than it was before we made that contract. Or, to put it the other way, we made every ton available to mine at a price of 50 cents less after it was taken out than could have been done without that contract. Or, in other words, we enabled the mining company to extract at an equal profit ore running five pounds of copper less per ton.

Now, everyone engaged in mining knows in mining operations on such a scale such as we have in Butte there are tens of millions, perhaps hundreds of millions of tons of ore passed by that is too low grade to pay. We have made available and commercially profitable tens of millions of tons of ore by that contract.

I want to call your attention to that contract. It is conservation; and the policy of conservation embodied in that contract refutes the statement made here in these hearings by one or two gentlemen—I do not remember just who they were—that the price of electric power is going to be regulated by the price of steam, and that the electric-power concern is simply going to take a shaving off the price of steam power in order to get the business. That is not the policy. There is an unlimited power, where anybody can come and develop it, if they can get the money to do so and find the market to use it. That has not been the case with us, and I do not think it will be general. I believe that the development of the natural resources of the State which are going to result from these cheap powers are worth more than the saving that could be calculated on the present consumption of power in a State. In the State of Montana the manager of our company, who talked with me last week when I was out there, told me there was only one steam plant operating in the State of Montana; that is, in the territory we cover. And they would not be operating that unless there was some special reason why they could not use the electric power; for instance, steam heating and electric lighting combined. In one case that company is owned by ourselves, and in one or two other instances where something of that kind prevails so they can operate more cheaply by steam power rather than by electric current.

Now, I want to say to you that [illegible] the States of the Union, in [illegible] per cent of the business—[illegible] consumption of electric power [illegible]

[illegible] commission?

[illegible] commission.

[illegible] operation?

[illegible]

[illegible]

[illegible] of the railroad com-[illegible]

[illegible] elected?

[illegible]

[illegible]

[illegible]

[illegible] you think some [illegible] case you mean [illegible] here. I should

be glad to know why you think Federal legislation is necessary, and what for?

Mr. RYAN. Federal legislation is necessary, in my opinion, because the Government owns the land upon which many power developments will have to be made to make use of the waters of the States. I am not opposed to the theory that the Federal Government has rights. As a matter of fact, I do not care anything about it. I am speaking from the standpoint of the practical water-power man who has invested his own money and secured the money of other people, and has raised $15,000,000 or $20,000,000 in the last four or five years for that purpose. And it is not important to me, and it is not important to the people who intrust me with their money to put into these enterprises, what the legislation is to be or from whom the company gets its title, as long as it gets its title, an undisputed, clean title that will give them security for the money that they put into those enterprises.

Senator WORKS. Assuming that to be so, the only legislation that seems to be necessary is to provide some way by which the Government can part with its title and invest it in somebody else who desires to develop the power?

Mr. RYAN. I think that is true.

Senator WORKS. The difficulty about the situation at the present time is that the Government, under the guise of providing for disposing of its property, is undertaking by this bill to go further and to control and dispose of the property that belongs to a State. I wanted to know whether you thought legislation of that kind was necessary.

Mr. RYAN. I am not versed in the law, Senator, and I do not think that is a subject on which I am qualified to make a statement.

Senator WORKS. But you are a business man and you know what is necessary.

Mr. RYAN. I am a business man, and I feel this way: I am perfectly frank to say to you that the business man, the man who puts his money into these enterprises, does not care so much under what law he operates as he does about the security of his title and whether or not he owns the property or whether he has a lease on the property he puts his money into.

Senator WORKS. You have State regulation now by which your work is regulated and controlled by the public untilities commission?

Mr. RYAN. Yes, sir.

Senator WORKS. You do not need any legislation for that purpose, I presume?

Mr. RYAN. Not for that purpose.

Senator WORKS. I am unable to see what necessity there is for legislation except to provide for a disposition of the Government lands. If you can think of any other reason, I would be glad to have you tell us.

Mr. RYAN. I do not know of any other reason. I think, so far as regulation is concerned, that regulation of the State authorities is ample, and it is all that can be used to advantage by either the Government or the State.

Senator ROBINSON. Do you believe in the principle of leasing by the Federal Government?

Mr. RYAN. I am not opposed to the principle of leasing. I would say it would be preferable, of course, in the matter of securing money to have an absolute grant.

Senator ROBINSON. If I understood you correctly, you stated in the beginning, in reply to inquiries by Senator Clark, that you had some constructive suggestions to make. I am very much interested to know what they are, and I think the whole committee would like to hear your suggestions.

Mr. RYAN. Thank you, Senator, because, perhaps, I have been taking up too much time in blowing my own horn.

Senator ROBINSON. That is an inference you make, and not an insinuation that I am making at all.

Mr. RYAN. I will endeavor to get to my text.

The first thing in the bill that I think raises any question is that of the authority of the Secretary. Now, if the policy is going to be adopted of leasing these lands, for the purpose of power development, some one has got to have discretion, whether it be a board or whether it be the Secretary. Personally, I do not care. I have had a great deal of business with the Departments in Washington during the past four or five years in connection with water-power enterprises. I have had very fair treatment. I have had from both the Interior Department and the Forest Bureau sensible, sound treatment on every proposition I have brought before them, and I am not any more biased, I might say, in favor of a commission form, a commission to administer these things, than I am to leaving it to one man if he is a sensible man. And I take it, if it is left to the Secretary, he is just as likely to be a sensible man as two out of three on any commission.

Senator ROBINSON. As far as that is concerned, you have no objection to leaving it to the Secretary of the Interior?

Mr. RYAN. As far as that discretion is concerned, I would not have any objection to leaving it to the Secretary of the Interior. I think that is all I care to say on that subject.

Now, about this 50-year period, there is some doubt as to whether a lease might be made shorter than 50 years. I will say that I think that ought to be definitely fixed. I do not believe it ought to be left to anybody's discretion unless, as has been suggested, on request by the applicant himself that he wanted a shorter term. I think a 50 year term ought to be fixed, for this reason—

Senator CLARK. It is so fixed, is it not, in the bill?

Mr. RYAN. No. "For not more than 50 years." It might be less. I say it ought to be at least 50 years, because in the development of water powers you have to figure on three periods. The first period is the period of construction, the second is that you might be able to have your business built up, have your market so you can get to going and make some money out of it, and that profit is going to be regulated by your public-service commission. You are not going to be allowed to make any too much. And then the last period is the period of expiration, the period when your plant is nearing the time when it has got to be valued under this bill and perhaps under any other bill. You have to spend a lot of money on maintenance and repairs in order to keep it up. Fifty years is not a long time.

I have in mind an electric-power plant that was built 23 years ago, and it is really a sad thing to contemplate to-day. Anybody

who is familiar with modern hydroelectric development would be ashamed to find himself owning that plant and running it. And things are going to be the same way in years to come. I think there is no question but what a grant of any less time would not enable anybody to get money in in quantity for development.

Another matter is that it is provided in the bill that not more than 50 per cent of the output shall be sold to any one customer. Now, I want to state to you that in order to develop in Montana the 12 or 13 plants we have been operating that all but three of them—and they were the smallest—had contracted for more than half of the output to one customer at the time construction was commenced. In other words, they were all built on contracts that will be prohibited by this bill. And I will cite the case of that mining contract that I spoke of. One particular plant of 40,000 horsepower was built to take care of that business. We have two more we are building now, one of 80,000 and another of 40,000. They are being built to furnish power on the only contracts we have for them, and the only business that we have actually in sight for them is the Chicago, Milwaukee & St. Paul Railroad contracts for electric power to operate 450 miles of its main line. That contract could not be made if this development of power were on public lands—it could not be carried out. It could not be started if that condition in this bill had to be complied with, and I think it would be a very serious defect to leave the 50 per cent provision in without having the authority in the Secretary to at least make whatever exceptions he saw fit.

Another thing I think would be a very bad thing to do would be to limit contracts to a period of 50 years. Under the contract with the mines which I spoke of, which is a very good one for the power company, although at a very low price, and a splendid one for the mining company, we are bound for the life of the mines. The mines may last 20, 30, 40, or 50 years, or they might last a hundred years. But if the power company was not assured of its business for a great many years, and if the mining company were not assured that in years to come it could get its power at an equally low cost, it would not have paid them to have gone to the expense of practically throwing away the $4,000,000 or $5,000,000 worth of machinery it had installed to carry on its operations with steam. It is a pretty courageous operation to dismantle a plant and throw away, perhaps in that case $4,000,000 or $5,000,000 worth of steam engines and boilers, and turn around and buy electric apparatus, generators, and such things. You need long-time contracts to do that.

Senator NORRIS. In that contract was any provision made that under any conditions that might arise in the future and that could not be foreseen at the time the contract was made it could be changed?

Mr. RYAN. No. It was a flat fixed rate running for the life of the mines.

Senator NORRIS. I should think then the mine would hesitate to make that kind of a contract for fear there might be other improvements made that would make it somewhat expensive. It might be very cheap now but it might be expensive in years to come.

Mr. RYAN. That company saved $2,000,000 a year from the time it put our contract into operation. You might say our company took the same chance.

Senator NORRIS. Oh, yes; but, still, they did take some chance.

Mr. RYAN. I do not think so. They have already gotten that money back now, and that is only four or five years ago. I think the chance is on the other side. For the power company to tie itself up for the life of the mines at $30 per horsepower in a State growing as Montana is and with the promising future that Montana has, I felt from the power side of it, we were probably selling power at $30 a horsepower to the mines when it would probably be worth $50 or $60 some time in the future for other uses.

Senator NORRIS. Of course that is conjectural. It may be in 50 years from now that the power would only be worth $20.

Mr. RYAN. I am only saying the chance was not taken exclusively by the mining company, but that the risk was on the power side just as much as the risk was on the other side.

And in the case of the Chicago, Milwaukee & St. Paul the contract had to be entered into to satisfy the railroad people for a period of 99 years. It will cost to equip the St. Paul Railway for its 450 miles of electric operation, 230 miles of which, by the way, is under construction now, and should be in operation the 1st of October next year, and the railroad will have expended something like $10,000,000 in addition to what the power company expends to reach the railroad lines and deliver the power. The railroad expenditure for substations, trolleys, and construction of all kinds and equipment, electric locomotives, and so forth, will be something like $10,000,000—certainly $8,000,000.

Now, in order to induce the railroad company to set aside its steam locomotives and steam equipment, plus making an expenditure of $10,000,000 to use this power, you have to give them an assurance that the contract is practically perpetual. They want to know when they are equipping that railroad that they will never have to throw away that equipment and go back to steam or something else, unless something should come along that would be much cheaper or much more desirable than electricity.

Senator CLARK. That contract is reciprocal, is it?—the railroad contract to take this electricity for 99 years?

Mr. RYAN. The railroad binds itself to take for 99 years and the power company to deliver. Now, the power company had to make a very low rate in that case in order to get the business. It was a new business; it was a thing that had never been attempted before. No other railroad had attempted to do it on such a large scale, and it had to be made very inviting for that railroad to do it.

Now, the price on its face looks to be a very reasonable one—$25 per horsepower year, or 0.0556 cents per kilowatt hour. But in the nature of the business, a very large proportion has to be set aside that can not be used, so the railroad agrees to pay for 60 per cent of the power set aside for it. It can not make use of 60 per cent, but it agrees to pay for 60 per cent of the power set aside for it, so it brings the amount that will be received by the power company from the railroad for the power set aside for it to $21 a horsepower year. And I will say that the economy and the conservation in that contract is something worthy of consideration by this committee and by the whole country. The railroad will pay upon the basis of its minimum requirements under the contract for the power delivered over 130 miles of its road for finished power delivered to its lines, something like $550,000 a

year. It would pay, it has paid, it is paying now, for coal to operate the steam trains to-day over the same line approximately $1,750,000.

Senator CLARK. And they furnish their own coal, do they not?

Mr. RYAN. They furnish their own coal from mines on their own road, and one-third of their equipment is used for hauling coal to themselves, whereas with the electric power there is not any such waste. It will save coal in the ground: it will save an enormous amount of money, and it will develop an industry and a business for the power company that leaves us, after we have taken care of that railroad, with a considerable amount of power that we can sell at low prices, at any kind of fair prices, to anybody who wants to develop electro-chemical, or any other industry, along our line or in our territory. And it is utilizing an absolutely waste product, that is, a product that has gone to waste from the beginning of time until we made this contract.

Senator NORRIS. You deliver power to the company at the nearest point at which it can be taken?

Mr. RYAN. We deliver the power to the company at nine points along its right of way. Our average distance is 120 miles, and our contract price to deliver nets $21 per horsepower year.

Senator SMOOT. Does that contract call for a flat rate on the 60 per cent set aside, no matter what they use?

Mr. RYAN. The railroad company agrees to take—it has two contracts, one with the Great Falls Power Co. and one with the Thompson Falls Power Co., identical in terms and for the same distances and approximately the same grades, one from the western part and one from the eastern part of the State; it agrees to take under each of those contracts 10,000 kilowatts as the minimum for its operation and an option on 15,000 kilowatts more than can be taken over 10 years from the day they commence to take the first power. They contract to take a minimum of 20,000 kilowatts, with options for 30,000 kilowatts more.

Now, the amount of power that is set aside for the railroad's use by the power company is the minimum specified by the railroad, and of that amount specified by the railroad in the contracts and in the options they have they must pay, whether they are able to make use of it or not, for 60 per cent. In other words, supposing they took the maximum and used 10 per cent of it; the power company, of course, could not afford to go on under that; but they have to pay for 60 per cent, and it is in the interest of the railroad company to make the best possible use of that 60 per cent and get all they can out of it.

Senator SMOOT. Those powers were developed on private lands, were they not?

Mr. RYAN. They were developed on private lands.

Senator SMOOT. If they had not been, you could not have made a contract for 99 years.

Mr. RYAN. No; we could not have made a contract of that sort with the railroad company and induced them to make their investment.

At the time that contract was made we negotiated and secured from the Department of the Interior a grant for a right of way under the act of March 4, 1911, which is set out in the Congressional Record, introduced at the request of Senator SMOOT, by which we agreed to pay 5 mills per thousand kilowatt hours for the current delivered

over the line built under grant from the Interior Department; and against that we have a credit for what we pay to the Agricultural Department of $5 a mile a year, and that is a grant under the act of March 4, 1911. And, taking these two things together, the grant of the right of way and the ownership of the site in fee, enabled us to make that contract. Our railroad contract was held up for about 18 months while we were negotiating the right-of-way agreement with the Government.

The CHAIRMAN. Will you furnish that grant to the stenographer and have him put it in the record?

Mr. RYAN. Yes, sir.

The CHAIRMAN. And have you a copy of your contract with the Milwaukee road?

Mr. RYAN. It is included with the grant. It is embodied in the grant.

The CHAIRMAN. You also furnish all the power for the B., A. & P. Railroad?

Mr. RYAN. Yes, we furnish the power for the B., A. & P. Railroad.

The CHAIRMAN. How long is that road?

Mr. RYAN. Eighty miles electrified. For fuel used in moving the very heavy tonnage transported over that road, ore, fuel, timber, and merchandise between the mines and the smelters the Butte, Anaconda & Pacific Railroad Co. paid on an average for 12 months, before the electrification of its line, $22,500 a month for coal alone, allowing nothing for the transportation of the coal over its own line, but $22,500 for the coal alone. At the same price and practically under the same conditions as in the Chicago, Milwaukee & St. Paul contract, that railroad has been operating now with electric current for a year, and it has paid, on an average, a little over $8,000 a month for finished power. In other words, it has paid $8,000 a month for power as compared with $22,500 a month for coal alone.

Now, that is another illustration of the fact that we have not gotten as nearly as we could to the cost of coal in making a price for electric power; and I do not think any body else will who has any conception of the business opportunities made by cheaper power.

Senator SMOOT. And that is true conservation.

Mr. RYAN. In my opinion, that is true conservation, Senator.

Senator NORRIS. Of course you got all you could get, did you not?

Mr. RYAN. I do not think so, Senator.

Senator NORRIS. You could have gotten a little more?

Mr. RYAN. I think that we could have gotten half the business at double the price. I think we are getting just as much money perhaps for the business as we could have gotten for half the business.

Senator NORRIS. That may be. But I have asked that question without any criticism on you whatever for getting all you can. That is perfectly natural.

Mr. RYAN. And I think this policy of ours is the policy of every man big enough to engage in this hydroelectric business to know his business.

I do not know but what I am skipping around, but I want to talk, if I may, about taking over the property under this bill by the Government. I have no objection to a clause that would provide for taking over the property on a fair valuation. I think that if this bill is designed and intended to encourage development of water

BUTTE, ANACONDA AND PACIFIC RAILWAY, SILVER BOW CREEK. ONE TRAIN—65 CARS—TOTAL WEIGHT 4,700 TONS, TWO 80-TON ELECTRIC LOCOMOTIVES.

power it is entirely in the interest of the people and the Government after all, acting for the people, to make that development at as low a cost as possible, to get the money as easily as possible, and to make all the development possible in the shortest length of time. I do not see that there is enough advantage in pinning it down and paring off the corners and taking away things that are of value in estimating the value of this plant at the time of recapture by the Government, to raise any serious question about raising money for developments. It is not going to amount to enough at the end of that time. I think that every company which is in this business ought to be independent and not to face a big loss in the taking over of its property and not to be driven to all methods and means to make all the money they can out of it for a short time, because there is only going to be a comparatively short time.

Now, my company—we are doing business in practically every important town in the State of Montana. We thought it was a matter of good business policy, and I think it is now, to build a fine office building in the city of Butte—to buy a fine building and repair it in the city of Great Falls; and in the city of Billings we are spending $160,000 on the company's building, with offices to rent, and that kind of thing. In the city of Lewiston we have a building. We think it is a good thing for the city and a good thing for the people for a concern like ours to show confidence in the future of the cities and the State.

Now, I say this: If we were going to lose our property on account of the valuation of these properties at the end of the 50 years, or at any other time, we would not pursue that policy. It would not be sensible to do it, but to rent our offices as cheap as we could and it would not help the growth of the community, and we would not have good-looking buildings, and we would not have the things anybody ought to have who is doing business in a large way. And I think it is a small thing to weight down such a business with. Here is the thing: This bill is either going to accomplish hundreds of millions of dollars and billions of dollars worth of good to the public land States in 50 years, it is going to enable them to develop industries, or it is not. Now, if there are delays in the development for a few years there is going to be more money thrown away than can possibly be gained by being technical about the rights of the Government or anybody else at the time of recapture and stripping the property of any value that it might have at that time. If the Government is going to take it over and operate it, that is one thing. But is the Government going to take over my property and operate it? To day we have 27,000 customers. Is the Government going into that business? Is the Government going to manage a business with 27,000 customers in the State of Montana? You all know it is not. You think about it, perhaps, and talk about it, but you all know that the Government won't go into that business. Now, what is it going to do? It is either going to re-lease to my successors (I won't be here) or it is going to grant a new lease to somebody else.

Now, if I have built up a good business and enlarged my business by low prices for power and encouraged the development of the country, and built up a splendid business, is all that going to be turned aside and is my plant going to be turned over to somebody who might be a friend of the Secretary of the Interior,

or a friend of somebody else, an outsider who never had anything to do with building up that business and getting it into shape? There is only one decent, sensible, fair thing can be agreed to in this thing, and that is that the plant shall be turned over, at its fair value, at the time of its recapture. And that is the only thing that is worth considering, because the difference between that and a definite plan of recapture that will put a definite value on everything now for a period of 50 years ahead is not anything at all compared with the advantages of putting this business now where it will be developed in our time and in our day, and, at the end of 50 years, more good will have come to the people so that if they paid two or three times what the plants were worth they would have been a good deal better off that if they had not been developed at the time they could be developed profitably.

Senator NORRIS. Mr. Ryan, that objection could be removed to a great extent, by a provision in the bill here that at the end of 50 years a preference right would be given to the company that had the property, in the making of a new lease?

Mr. RYAN. I would consider that would be necessary and I would consider if the Government took over the property at the end of the lease it should be taken over at its fair value. I would not put anybody in a position where they were trying to skimp and save money and keep it out of the business and out of the development of the country for the last 20 years of its lease. I do not believe that is a broad policy.

Senator NORRIS. I suppose that provision was put in the bill by the draftsman for the reason that he figured that at the end of the 50 years nobody knows now what the conditions will be or what anybody will want to do.

Mr. RYAN. Then why not say the sensible thing, that it will be taken over at its fair value. It may not be worth anything at the end of 50 years, and it might be worth a good deal.

Senator NORRIS. I think myself as to whether you would get the cost or whether you would get the value, you might either be the winner or the loser.

Mr. RYAN. Yes; we might be either one either the winner or the loser.

Senator NORRIS. Because nobody knows whether this property will be worth as much as it cost at the end of 50 years, or a great deal more.

Mr. RYAN. Exactly.

Senator STERLING. Do you really need, Mr. Ryan, a provision like that in the bill? Would it not tend to discourage the taking out of permits?

Mr. RYAN. I think it would. I think it would tend to discourage actual development. I think, by all means, what should be provided for, if it can be provided for in this bill, is that Government lands and water-power sites should not be put in a way so that speculators could take them up. What the people of the country want is to get development of these enterprises, and not issue permits and have them offered around, as they would be, trying to get money for the rights and not for development.

Senator NORRIS. Now, Mr. Ryan, your suggestion there reminds me of another point that the bill does not cover, and I should like to get your idea as to whether it ought to be covered. Will there be

any danger of men getting these permits for the purpose of speculation and selling them out to somebody else?

Mr. RYAN. I think there is always that danger, Senator.

Senator NORRIS. If that be true, then ought not there to be some provision in this bill that would make it unnecessary, where no money had been spent or where no development had been made, for the Secretary to go into court and cancel the lease?

Mr. RYAN. I think so. I think that the Secretary should give a preliminary permit for the purpose of investigation; and, unless actual development was commenced within a reasonable time and continued reasonably, that the permit should be canceled, or the right should be canceled, whatever it was—the permit or whatever it was.

Senator NORRIS. Of course he could go out and cancel it now under the bill, but he would have to go into court to do it. That would be a long, tedious proposition, as you know.

Mr. RYAN. I think a man who took out a permit ought to have a reasonable time—

Senator NORRIS. Oh, yes.

Mr. RYAN (continuing). In order to do the engineering work and to see what he could do about providing the money to carry out his development, and so on.

Senator NORRIS. But, at the same time, if it is possible to safeguard it, it seems to me there ought to be safeguards against speculation in the permits.

Mr. RYAN. Still, the man who went ahead in a bona fide way and spent his money in examination and engineering——

Senator NORRIS (interposing). He ought to be permitted, of course.

Mr. RYAN (continuing). Ought not to have any cloud upon his right to go ahead and finish.

Now, I think that the provision against selling to distributing companies is not a desirable feature in the bill. It is absolutely necessary for a water development to market some of its product through distributing companies at times. Let me say this: If that provision was put in there, my concern, occupying to-day the principal part of the State of Montana and engaged in public utilities, lighting 30 of the leading cities of Montana, would be confirmed in its monopoly as against an independent developer of power. And if a man who developed power came along and developed it for the purpose of electrochemical uses, something of that kind, and had some power to spare that he could devote to the general hydroelectric business, he ought to be allowed to sell to a public utility and help to maintain his enterprise.

However, I think there are many others who are better able to speak on the subject than I am, and I do not believe I ought to carry it beyond that.

The CHAIRMAN. In regard to taking over the property, Mr. Ryan, in the case of a big city block, built for incidental purposes, where the company, the builder, is occupying only one office suite out of a hundred, maybe, do you think the Government ought to take that over at all at the end of the term? It is merely an incident of the business.

Mr. RYAN. Then, how are you going to differentiate, Senator? You would have to prohibit public utility companies and power companies from owning buildings and helping to build up the towns in which

they are operating, because you would have to make such a technical definition of the real estate that could be taken over and that should be taken over. You would certainly have to take over the site of the substation and the site of the power plant in the city. Suppose you had undertaken to connect with the power plant in the city? Now, in our buildings, we have substations in the basement of these buildings. We use them in our own business. We use them as distributing centers for the cities to some extent. But instead of building homely, ugly basement properties and putting our plants into them, we build a basement and then build a four, five, or six story building on top of it that is in keeping with the town and is looked upon by the people as being enterprising on the part of our company. I do not think you could definitely and successfully differentiate between the class of real estate you would have to take over without making it impossible for the companies to do things that public policy would direct them to do—that a broad public policy would direct them to do.

The CHAIRMAN. Your idea is, then, they would virtually have to take over all the real estate?

Mr. RYAN. I think they would have to take over all the real estate or holdings of the company that were connected with the power business.

The CHAIRMAN. In the case of a plant connected up with a number of others, a series of other plants, what do you think ought to be done about taking over at the end of the lease there only the property dependent upon, tied up, or connected essentially with the one project or with all?

Mr. RYAN. I think that that ought to be a matter of agreement between the Government and the applicant when he takes out his lease as to whether existing distributing systems, existing lines, existing developments, are going to be included or not. In my case, of course, it would not be included. No one willingly would come under the provisions of this bill if he has absolute title before, and without it; and I think it ought to be left largely to be determined as to what should be included up to the time that the lease is made. Beyond that point anything, of course, that is directly connected with the project itself I think ought to be considered as part of the system when it is taken over.

Senator NORRIS. Now, were you going to talk about the charge, Mr. Ryan?

Mr. RYAN. The charge?

Senator NORRIS. This bill provides, you know, that there shall be a charge made. What is your idea about that?

Mr. RYAN. Well, I think it will cost the Government something to administer this business. It ought to be a minimum charge, because there is not any question that I won't pay it. It won't come out of my pocket; I will pass it along to my customers. I do not think that is the object of this bill to put an additional burden on the consumer.

Senator NORRIS. One of the objections made by the governor of Colorado, and the objection made by a great many other people to the leasing system generally is that this property is held out of taxation for State purposes.

Mr. RYAN. Yes.

Senator NORRIS. Of course you would pay no taxes-

Mr. RYAN (interposing). It is held out now.

Senator NORRIS. Yes, it is held out now and would be held out unless there was an absolute title given to you, so that there would not be any taxes paid on it.

Mr. RYAN. As a matter of fact, I think that is largely in the imagination of the governor of Colorado, if you will permit me to say so. I think our companies would have to pay taxes, just as much, whether they built their power plants on public lands or not.

Senator NORRIS. Their improvements would be taxed?

Mr. RYAN. Their improvements will be taxed and they will pay about so much.

Senator NORRIS. Now, you have had a good deal of experience in Montana, and, as getting some light on that subject, I would like to have you give us any information you have in regard to the taxes you have to pay in Montana on similar properties.

Mr. RYAN. In the period of development, out taxes are very reasonable. When our plants are developed and are ready to supply the market, we are taxed in Montana, on the approximate value of the property.

Senator NORRIS. Taking a case where you had a dam site now and owned the title—I want to compare the two cases, one on Government land, where you have a lease, and another one on private land where you own the fee simple. Can you give us any information as to what the difference in taxes would be in those two cases?

Mr. RYAN. I do not think so. My judgment about it is that there is not any difference; that the power company would be taxed as much in the one case as in the other.

Senator NORRIS. There certainly would be a little difference in the value there, I should think.

Mr. RYAN. There might be a little difference. But, in other words, we are taxed so much on the right of way now on the Government land under this grant we obtained from the Department of the Interior some years ago. I have no doubt we are paying just as much tax on that and we would pay just as much if it were a lease as if we owned the fee absolutely.

Senator NORRIS. Now, that is interesting taken in connection with the objection made by the two governors yesterday.

Mr. RYAN. I do not think that is a substantial objection. That is my feeling about it.

Senator NORRIS. You think as far as taxation is concerned, that practically there is no difference?

Mr. RYAN. I do not believe there is.

Senator NORRIS. The State would get just as much out of it under a leasing system as they would under a fee system?

Mr. RYAN. I believe it would.

Mr. Chairman, I think you have been good enough to give me a long time to talk, and while there are other things I would like to talk to you about, I think they have been pretty generally covered already by others. There are, however, one or two other points which I want to bring up.

The CHAIRMAN. I think we had better suspend at this point, and you can take them up after recess.

(Thereupon, at 12.15 o'clock p. m., a recess was taken to 2 o'clock p. m.)

AFTER RECESS.

The committee met at 2 o'clock p. m.

STATEMENT OF MR. JOHN D. RYAN—(Continued.)

Mr. RYAN. Mr. Chairman and gentlemen of the committee, I think I have not much more to say, unless the members of the committee desire to ask some questions, than to sum up and, as it has been suggested by some of the committee, I might offer some constructive ideas that might help the committee in its consideration of the bill.

In summing up I would repeat again that from a practical business standpoint I do not feel that it is material whether the discretion that is necessary to be placed in some hands is left in the hands of the Secretary or put in the hands of a commission. And, as I have said before, we have had a great deal to do in the last four or five years with two departments of the Government; the Department of the Interior and the Department of Agriculture—the Forestry Bureau. We have had no difficulty in securing such rights as the department heads were in position to grant us under existing laws. There has not been any conflict between the departments that I have heard mentioned by other water-power people in our negotiations with them. We have negotiated with them separately, and particularly in the matter of securing rights of way for transmission lines under the act of March 4, 1911, which provides for a grant; we have secured that grant for our lines, covering our entire system of, I think, something like 1,600 miles of high-power transmission lines, from both departments.

There is a variance in one grant from the Interior Department from that from the Forestry Bureau, in that there is a charge per thousand kilowatts delivered over the line made by Interior Department and a charge of $5 a year per mile over the forest lands. But it is provided in the grant from the Interior Department that whatever we pay them for the total amount of power transmitted over the line or delivered over the line, as the grant reads, shall be diminished by the amount that we pay to any other department of the Government on account of the same rights. So that there is not any duplication of charge.

Senator CLARK. Have you acquired some power sites from the Government?

Mr. RYAN. We have not actually acquired any power sites, as I remember it, Senator Clark. We have a very large reservoir at the headwaters of the Madison River, where we have created, at our own expense, partly on lands purchased of private owners and partly on lands in the Government forest. We have created a reservoir or lake with a shore line of 68 miles. The contract that we entered into with the Agricultural Department or the Forestry Bureau, covers the right to use that water in the development of power for which we have agreed to pay on a scale on an estimated minimum of power that will be added to our capacity by the liberation of that water as it is needed, running from 10 cents a horsepower --

Senator CLARK (interposing). How long is your lease for in that case?

Mr. RYAN. For 50 years running from 10 cents a horsepower to $1 a horsepower the tenth year, and stationary after that.

Senator CLARK. What arrangement have you, if any, for the disposition of that after the 50 years?

Mr. RYAN. We have no arrangement, as I recall it.

Senator CLARK. Under this bill your power system, unless there was some arrangement made at the end of the 50 years, would be taken over by the Government?

Mr. RYAN. It could be taken over by the Government?

Senator CLARK. It could be taken over by the Government—the whole system?

Mr. RYAN. Not the whole system, only the reservoir.

Senator STERLING. Do you transmit power to points outside of the State?

Mr. RYAN. We have no transmission outside of the State of Montana. Our business so far has been entirely within the State lines.

Senator STERLING. Have you considered the feature of the bill which provides that in case of the transmission of the power from one State to another the control and regulation of charges and rates shall be under the Secretary of the Interior?

Mr. RYAN. I have; and I consider that on any business that is interstate, that is, the power itself, that it will necessarily be subject to some Federal regulation, whether it is by the Interstate Commerce Commission or some other interstate power commission, or the Secretary of the Interior or some other body or some other man. I think that if we admit the necessity of regulation, I freely admit that we are bound to submit to some regulation, and we would prefer some regulation covering that interstate business rather than to bring together, perhaps, the public service commissions of two States and try to get them to agree as to what they shall do in a particular case.

Senator CLARK. This bill provides in that case that the regulation shall be with the Secretary of the Interior, and also the regulation as to the issuance of stocks and bonds. Now, if you were operating over a State line it provides not only for the supervision of that portion of your power that might be transmitted into another State, but all of it. Would that make any difference?

Mr. RYAN. I think that would be a very objectionable feature in the law. I think any law that would make it necessary for us to submit the issue of stocks and bonds and securities of the company for money, let us say, to make developments, with which we would have to satisfy two authorities; first, the State in which the money was spent, and, second, the Federal authority, that would work a hardship on us and create, perhaps, some considerable difficulty in negotiating sale of securities.

My idea of regulation is that the regulation should not extend to purely intrastate business, should not extend to the issue of stocks and bonds; that practically every State in the United States now has provided in its laws creating public service commissions, that the authorization for the issue of securities shall be made by the public service commission of that State; and the amount of business that is interstate would be comparatively small in any case, as compared with the business in the State, naturally. I think that would create a situation where the State and Federal authorities would be in conflict, we will say, as to the issuance of securities, might make it very difficult to raise money to make these developments, and might result

difficult to raise money to make these developments, and might result in a thing that is not desirable, and that is a prohibition of a public utility or a waterpower seeking a market across a State line. I think that the market, whether it is across a State line or within a State ought to be reached to the best advantage by the power development.

Senator STERLING. In a mere matter of interstate transmission of power, Mr. Ryan, would it not seem more appropriate that the supervision of that business should be under the Interstate Commerce Commission which regulates other interstate commerce, than under the supervision of the Secretary of the Interior?

Mr. RYAN. I would not say as to that. If the Interstate Commerce Commission is a qualified body to treat with these subjects, yes; but this is an intricate business; this is a business that can not be attended to and properly regulated or properly handled by some one who has not the equipment to do it, some board or branch or individual officer that has the equipment to do it.

Senator SMOOT. Do you not think that the Interstate Commerce Commission is just as well equipped to do it as any Secretary of the Interior would be?

Mr. RYAN. I think perhaps the larger the body the more likely it would be to be cumbersome.

Senator STERLING. Would not their experience in regulating railroad rates give some advantage to that body or board in the matter of the regulation of charges?

Mr. RYAN. I think that their experience is confined to rate regulation of railroads, which is along an entirely different line.

Senator ROBINSON. This requires a technical knowledge, does it not, in order to fix rates?

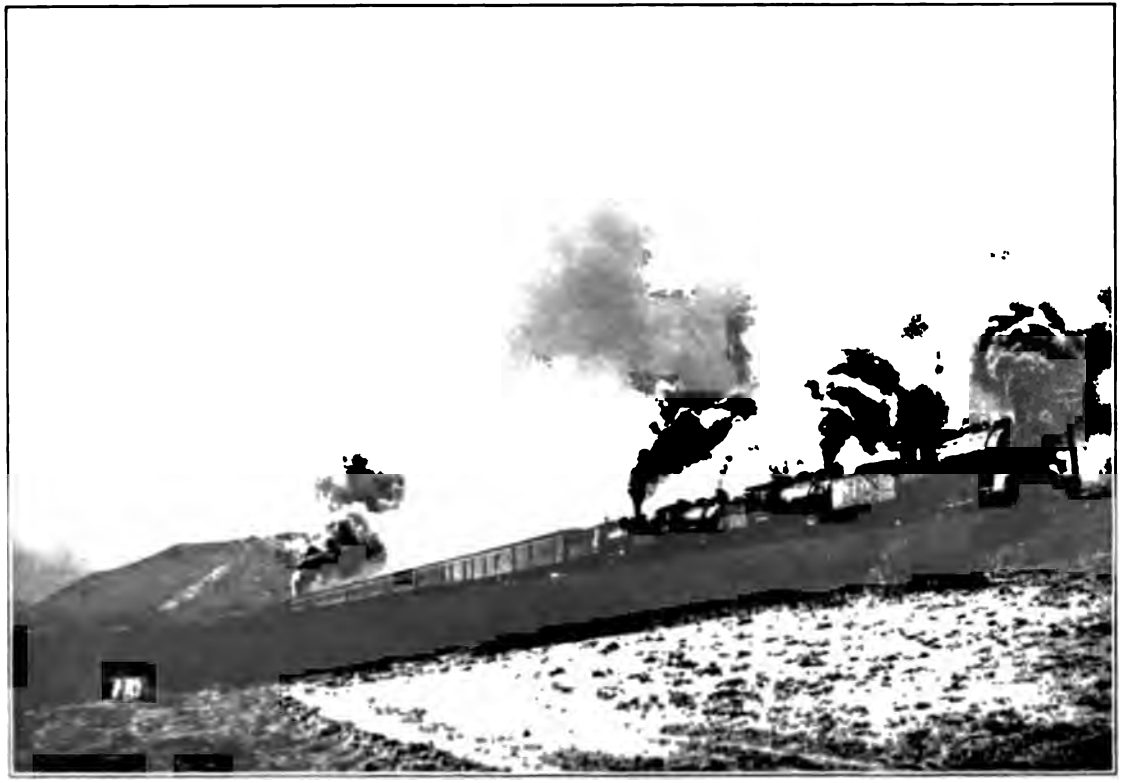
Mr. RYAN. It requires a technical study and technical knowledge to regulate the rates and to adjust the operations of the regulated body or corporation to the needs of the country and of the district in which it is operated.

Senator SMOOT. Not one one-hundredth part, though, of the knowledge required to fix rates on the railroads.

Mr. RYAN. No; but in the sense that any one body can not compile or bring together all the technical knowledge in every line of business. I think perhaps it would be preferable to have the regulation, if any there be on the part of the Federal Government, in some other hands than the body that is charged with the regulation of railroad rates. It is an entirely different thing.

Senator CLARK. Suppose you have a body vested with like powers over the regulation of these rates which the Interstate Commerce Commission has over railroad rates; suppose you created a power commission; what would you think of that proposition as compared with the advantages or disadvantages of having it all under the Secretary of the Interior, bearing in mind always, that the Secretary of the Interior is, of course, unable to give his personal attention to this important branch of the work?

Mr. RYAN. He would have to delegate the authority, Senator. I do mean that exactly. I do not mean that he would have to delegate the authority, but he would have to delegate the investigation and have returns from subordinates, undoubtedly, just as the Interstate Commerce Commission would if it was in their hands. And I think that the thing resolves itself back to the question that whoever is in position to make the most complete study of it and to



DENVER AND R. GRANDE RAILWAY EASTBOUND TRAIN NO. 6 CROSSING DIVIDE AT S. LOOERS SUMMIT, ELEVEN CARS, FIVE LOCOMOTIVES.

know most about it is best qualified to regulate it, and the man or body that has too much else to do——

Senator CLARK (interposing). I was speaking of a body that was created for this sole purpose.

Mr. RYAN. I hardly think it would be found necessary to create a body for this sole purpose, because the regulation in every State in the United States where these power companies are seeking to do business is so complete and so thorough that the necessity for Federal regulation is going to be very slight, and it would be so where there is any actual operation of these developments after they are made.

I do not think that the regulation will warrant an expensive organization to carry on that work, because there will not be enough of it to do.

I want just briefly to emphasize my remarks on the subject of the 50 per cent clause, and say if the developments that we have made in Montana were attempted—if we had to consider that clause of the law we could not have made any very large developments. They were all made upon contracts for more than 50 per cent of the initial output, and, in most cases, for more than 50 per cent of the total output—of the total capacity.

And I want to emphasize again the fact that I do not think that the comparative cost of steam-generated and hydroelectric power is going to make it necessary to take any undue and extraordinary precautions in the drawing of this bill; that the hydroelectric power concerns are going to seek their markets and make their markets in order to develop as much business as they can, and they are not going in there simply to take away the business of the steam plants at just a slight reduction. I think that the necessity for a charge—in other words, a flexible charge, a sliding charge—against the power companies will never be found to be necessary; that the conditions under which the hydroelectric power will be developed will be such that they will always be under the necessity of creating markets rather than getting high prices, and that in any event the State public utilities commissions will regulate their charges and that any provision for a charge in the bill that might be moved up and down in order to, let us say, regulate the profits of the power companies, will not be found to be necessary.

The principal thing, as I see it, in this whole bill, and the thing that is worthy of the most attention, is the matter of valuation at the time of recapture. I think that the time is so far off—50 years from the day the lease is granted—that any attempt to define within narrow limits what shall be paid for the property taken over is going to result in difficulty of getting capital and will result in an unworkable law, and I think, for the early development of water powers, for the easy raising of money and the encouragement of the business generally, the development of the natural resources of the country that can be made through cheap power, all outweigh entirely the necessity for any narrow construction of the valuation at the end of the period, and I am very much in favor of a broad clause stating that if taken over by the Government the fair value shall be paid to the owner of the plant, and in any lease given at the expiration or subsequent to the expiration of the original lease, the original lessee should have the preference right.

Senator CLARK. Let me ask you, Mr. Ryan: I suppose that the power you get from Great Falls and otherwise you get by appropriation under your State laws?

Mr. RYAN. The water, you mean?

Senator CLARK. Yes; the water.

Mr. RYAN. Yes.

Senator CLARK. Is that a perpetual right that you acquire?

Mr. RYAN. As I understand it——

Senator CLARK. And it is forfeitable for nonuse?

Mr. RYAN. It is forfeitable for nonuse, the same as all water rights in all the Western States.

Senator CLARK. Then if the lease of the power site, provided it was on Government lands, were terminated, that would also terminate the water right?

Mr. RYAN. If it was not used, of course. If there was not a continuing use it would certainly terminate the water rights.

Senator CLARK. Is your appropriation made in such a way that it can be transferred without the use? I mean your appropriation of water in that State.

Mr. RYAN. Transferred without the use of the water, you mean?

Senator CLARK. Yes.

Mr. RYAN. I do not so understand it. I understand that there are no rights of water in our State except the rights of use.

Senator CLARK. I was asking particularly in regard to Montana. I know it is so in the State of Wyoming; but I think in Utah it is different.

Senator SMOOT. It is different in this way, that we can transfer water from one piece of land to another; but it must be for a beneficial use.

The CHAIRMAN. You can do the same thing in Montana.

Senator SMOOT. In Wyoming they can not do that. It passes with the land.

Senator CLARK. It passes with the land.

Senator SMOOT. In Utah you can take the water from one piece to another.

Mr. RYAN. I will say that I have just returned from a trip to the West, and I did not expect to be able to appear before the committee during these hearings. In order to get my views and the views of my company before the committee, Mr. Kelley, the chief counsel of our company, drafted a letter addressed to the committee, which he has sent to me, after learning that I was to appear, and asked me to hand it to the committee, and if it is agreeable to the committee I would like to have that letter incorporated as a part of the record.

The CHAIRMAN. That may be done. Just furnish it to the stenographer.

Mr. RYAN. Gentlemen, I am very thankful for your courtesy, and I do not think there is anything more I have to say on this question.

The CHAIRMAN. We thank you, Mr. Ryan.

(The letter referred to in the remarks of Mr. Ryan is as follows:)

BUTTE, MONT., *December 18, 1914.*

Senator HENRY L. MYERS,
Chairman of Committee on Public Lands, Washington, D. C.

DEAR SENATOR MYERS: I have greatly regretted my inability to have been present at the public hearings of your committee recently held, during which the proposed water-power legislation was considered and opportunity afforded for the presentation of views in regard thereto. I am pleased to avail myself of the suggestion made that I submit my views, particularly with reference to House bill 16673 of the Sixty-third Congress, known as the Ferris public land water-power bill. I have no doubt that the public hearing developed a discussion of all of the features of the proposed act, and will therefore confine myself to as concise a statement as possible, discussing only those features which seem to me of paramount importance. It is to be assumed that the purpose of the proposed legislation is to bring about, under the sanction of legislation which will afford adequate protection to the investor, while at the same time conserving the public interest, the development of the water powers of the West, and as a result of such development of water power, a like development of natural resources.

For a number of years the necessity of such legislation has been conceded by all parties interested in the development of water power, and by those charged with the administration of the public domain. It is to be sincerely hoped that the widely divergent views heretofore held may be to some extent reconciled, and a program of constructive legislation followed. In order for such legislation to attain the desired object, however, it must of necessity be of such a character as to afford ample security to the investor and an opportunity for the building up of a profitable business, while at the same time the interests of the public are adequately protected. Any restraint imposed by the legislation which goes beyond the necessity of protecting the public welfare and imposes harsh and burdensome conditions, will undoubtedly defeat the purpose of the legislation.

I. The first provision of the act is that the Secretary of the Interior be, and hereby is, authorized and empowered, under general regulations to be fixed by him, and under such terms and conditions as he may prescribe, not inconsistent with the terms of this act, do lease, etc.

The objection to this clause is that too much authority is vested in one man, and that it may be arbitrarily exercised. I am frank to confess that this objection does not appear to me to be of controlling force. While I think it would be better policy perhaps to have the authority delegated to a commission consisting of three officials, I believe that inasmuch as the terms of the lease must be agreed to in advance, and that the lease is irrevocable except for the causes specified in the bill, that this objection may be overcome. If it should develop that the discretion imposed in the Secretary of the Interior was being arbitrarily or unreasonably exercised, the matter could undoubtedly be corrected by suitable legislation.

II. *The leasehold.*—The proposed bill provides that the Secretary of the Interior be, and hereby is, authorized and empowered * * * to lease * * * for a period not longer than 50 years, for the purpose of constructing, maintaining, and operating dams, etc. There has no doubt been much discussion of the leasehold principle before the committee. No one can say that as a matter of preference it would not be more desirable to obtain a fee title than a leasehold title. Such a title would make financing easier, and would free the grant from many of the complications and possibilities that are inherently attached to a leasehold, and the working out of which in connection with a going concern is fraught with much difficulty. I am constrained to believe that not only from the selfish standpoint of the water power companies, but also from the standpoint of public policy much can be said in favor of either an indeterminate or fee-simple grant as a correct governmental policy.

In this connection I wish, if possible, to make the position which the Montana Power Co. and its associated concerns have taken clear. These companies have adopted a policy based upon the conviction that the United States Government should not and will not turn over its water powers without adequately safeguarding and protecting the public welfare. We concede the proposition that anyone who enters the public utility field should recognize the fact that his business so far as it affects the public should be subject to governmental regulation. We have likewise conceded at all times and agreed to a policy, so far as the United States Government is concerned, that an unlimited and unrestricted title in fee can not be reasonably expected, and following this policy, the Great Falls Power Co. was the first and I believe is the only power company that has entered into a satisfactory contract with the United States Government. I refer to the contract made between it and Secretary Fisher on the 6th day

of January, A. D. 1913, which has been the subject of wide and favorable comment on the part of those who believe in a proper conservation policy. When, however, it is proposed to limit the title acquired to a leasehold, running for a specified number of years, it introduces grave questions of public policy that should receive careful consideration, keeping in mind the primary purpose of the legislation. As is well known, it is a difficult matter to finance water power projects, and the experience of those who have made large investments in many instances has been most disappointing. The percentage of water power failures is probably larger proportionately than is usually attendant upon business ventures.

It is most natural that where only a limited tenure of title is obtained, the rates charged must of necessity be higher than if the project was owned in perpetuity, for in addition to the charges that must be made for extensions, fixed, running, replacement, repair and maintenance expense, there must also be taken into consideration the necessity of amortizing the property, or a considerable part thereof, during the period of years for which title is held. This necessity inevitably results in higher rates being charged for service from the inception of the enterprise, than would otherwise be justified, and if we look at the matter from a business standpoint, rates must rapidly increase as the leasehold approaches expiration, or else the plant must be suffered to fall into a state of neglect, thereby impairing the public service in order to save maintenance, repair and replacement charges that otherwise would have to be amortized during the few remaining years of the lease. As illustrative of the proposition that I am contending for, we may divide the life of a leasehold into three periods:

1. The period of construction and development of the business.
2. The period of natural increase and profitable return.
3. The period of expiration, when in order to maintain efficient service, extensions, replacements, repairs, and maintenance charges will be heavy items.

Assuming that the leasehold is properly divided into these three periods the practical business propositions embraced and which must of necessity work out are as follows:

First period. (*a*) *Construction.* A considerable period of time, varying at from three to five years, must elapse during which the plant may be constructed, transmission lines built, and the development of business initiated. It is fair to assume that upon the basis of a 50-year leasehold, 10 per cent of the time will have elapsed before the project is ready to render service, develop business, or pay any return upon the sums invested. During this period of inactive earning power promotion, organization, engineering, and construction charges, together with interest on all of these necessary expenses, and taxes, have been paid, thus burdening the plant with heavy obligations before perfecting any earning capacity.

(*b*) *Development.*—It is the policy of the Government, and should be the policy of all power producers, to develop the project to its maximum capacity. To do this it is, in the majority of cases, necessary to develop far beyond the existing market. I have in mind a water-power development now being made in the West where, in order to utilize the maximum capacity of the power site, a development is being installed which will have a minimum capacity of eight times the amount of power which has been contracted for in advance.

Every water-power company which has a growing business, and particularly those companies that are operating and contemplate operating, in the sparsely settled and only partially developed regions of the West, where the proposed legislation will have its fullest application, are obliged to make heavy investments upon which no immediate return is possible. To endeavor to secure a return on total investment during this early or first period would necessitate the charging of rates so exorbitant as to preclude the development of the business, and to curtail rather than extend the use of hydroelectric power. As a matter of business policy rates must of necessity, during the first period, be limited to what will pay, in many instances, a nominal return only upon the actual money invested, leaving no profit for the owner and developer of the business. This situation is realized by all conservative water-power companies, and with it comes a realization that aside from bond interest and sinking fund requirements, additional revenues must be made by maintaining as cheap rates as possible, extending the business and substituting hydroelectric power for other means of generating power required for different industries.

Second period. During the second period of a leasehold, when the business has been developed, a fair return may be made upon the investment. Under the regulation control of State public service commissions only such a return as can be adequately justified may be looked for. This may be regarded as the period of profit to the owner and developer, while at the same time the public interest is conserved through the instrumentality of its commissions.

Third period.—During the latter part of the leasehold the plant will inevitably be reaching a stage where maintenance and renewal charges will be heavy items. In order to properly serve the public, plants, structures, dams, transmission, and distributing systems should be maintained at the highest possible point of efficiency. Extensions should be made to meet the public need, and in the rapidly growing sections of the West, such as the State of Montana, these extensions require a constant expenditure of new money, amounting to a very considerable portion of the total outlay. If a company is facing a situation where its physical property may be taken over at the end of a comparatively few years, it will inevitably follow that there will be a disposition to save as much money as possible upon renewals, repairs, and extensions, and such sums as may of necessity be invested under these heads must, to as great an extent as possible, be amortized during the remainder of the lease, resulting in a constant effort to increase rates to the point where as large a rate as the customer's business will stand must be charged, and justified by the governmental agencies which have imposed upon the power concern the necessity of amortizing at least a portion of its property, not according to the standard usually adopted, to wit, that of wiping it out during the estimated life of the property itself but by introducing the fictitious element of an expiring leasehold. It is my belief that where the Government retains the right to control and regulate rates in the public interest, it should not be necessary to fix a term beyond which the proprietary right of the developer may not extend, when by so doing the inevitable result is directly in conflict with the public welfare and results in the imposition of a direct tax upon the users of a public utility, which otherwise might be avoided.

Assuming, however, that the leasehold principle has become fixed governmental policy, the particular leasehold provision in the Ferris bill would still, to my mind, be objectionable. The language of the bill is that a lease may be granted, not for a period of 50 years but for a period not longer than 50 years.

As I have heretofore pointed out, a period of 50 years is exceedingly short within which to measure the possible life of a business, particularly a business which requires the large initial investment and the constant application of managerial ability and industry in order to extend and make it profitable. No leasehold provision should be considered, and none will ever be practicable, in this connection, which provides for a shorter period than 50 years. Therefore, I believe that the minimum term of 50 years should be definitely fixed by the bill itself.

Extension of period.—There is no provision in the bill permitting an extension of the leasehold period. Such a provision seems to me extremely desirable, both from the standpoint of the Government and the water-power developer. If, at the end of the 50-year period, the developer has kept faith in performing the obligations imposed upon him by the lease, and is conducting his business in a satisfactory manner, there should be some authority vested somewhere to permit an extension of the lease, so that the business may be conducted in the event of the United States Government not wishing to acquire the property under the provisions of the bill.

A provision which would enable the developer to secure an extension of at least 25 years, in the event of the Government not taking over the property, should, I think, be contained in any legislation of this character.

Section 2 of the bill provides that in each lease made in pursuance of this act it shall be provided for the diligent, orderly, and reasonable development and continuous operation of the water power, subject to market conditions, and shall provide that the lessee shall at no time contract for the delivery to any one consumer of electrical energy in excess of 50 per cent of the total output.

While the purpose of this provision is plain, and doubtless an argument may be made in support of the underlying theory that caused its incorporation in the bill, yet no argument, to my mind, can be made in making the provision so inflexible that there shall be no discretion to modify this provision in the event of its becoming necessary or desirable so to do. In this connection I have in mind the tremendous possibilities with reference to water-power development in the West, and particularly in the State of Montana. The United States is now behind the leading industrial nations of the world in the development of electro-chemical industries. The manufacture of aluminum, nitrates, and other products, some of which are, or may become, necessities of our own Government, has not been developed to the point where the Government itself is in a position to acquire through domestic manufacture articles that might in time of war be absolutely essential to a proper carrying on of the national defense. Many of these products can only be produced by the use of large quantities of cheap power, to secure which it may be necessary to establish manufacturing plants at the site of the development in order to save the cost and loss of transmission. It should be the policy of our Government to encourage these industries. In many instances

where suitable natural products exist for establishing electro-chemical industries, it may be necessary to contract for the entire output of a power development, and consequently it would seem short-sighted policy and one wholly unjustified to prevent the exercise of any discretion on the part of the governmental authority charged with the administration of the proposed legislation from permitting, under suitable circumstances, the sale of more than 50 per cent of the power developed to a single customer.

This feature of the bill is particularly objectionable when considered in connection with the possibilities of the use of power in connection with irrigation projects. Anyone familiar with western conditions can readily cite instances where large tracts of arid land lie in close proximity to water-power sites. In many cases, in order to irrigate these lands, practically the entire output of the plant would be required. It would therefore seem too plain to require argument that this provision of the bill should either be eliminated or made sufficiently flexible to enable discretion to be used in proper cases for the sale of such an amount of power as may be required in the particular instance to fit the situation being considered.

Section 5. Provisions respecting the right of the Government to acquire property — In considering these provisions sections 5 and 6 may be considered together. The theory of these sections is:

(*a*) That the Government may take over the property upon the expiration of the lease, but it is not obliged to do so.

(*b*) That in the event the United States does not exercise its right to take over, maintain, and operate properties, as provided in section 5, or does not renew the lease to the original lessee, upon such terms and conditions, and for such period as may be authorized under the then existing applicable laws, the Secretary of the Interior may upon the expiration of the leasehold, lease the properties of the original lessee to a new lessee upon such terms and under such conditions and for such periods as applicable laws may then authorize; and upon the further condition that the new lessee shall pay for the properties as provided in section 5 of this act.

These provisions raise an uncertainty which should not exist, and which it seems to me can readily be avoided by the incorporation of suitable provisions in the bill. Inasmuch as the United States is not obliged to take over the property there should be some provision fixing the status of the lessee with greater certainty than to leave him wholly dependent upon the possibility of satisfactory legislation being adopted in the interim. Unless such legislation is adopted, the one thing that is certain under the proposed act is that the rights of the lessee will be jeopardized. The Government may take over the lease or the Secretary may substitute a new lessee, but no provision except that of future legislation is made for the protection of the original lessee.

It would seem to be but fair that the original lessee should have the preference in the event of a new lease being executed upon the expiration of the 50-year period; by the industry, ability, and enterprise of the lessee, a large and profitable business may have been built up; every obligation may have been faithfully performed by the lessee, yet, notwithstanding such a condition, it does not, under the proposed law with the Secretary of the Interior to turn over such a business to a stranger thereto, upon such stranger paying for the physical property according to the method prescribed in the act. The opportunity for discrimination, inequity, and favoritism which necessarily accompanies such a provision, should not be sanctioned or tolerated in any public law. Under such a provision, the rights of the original lessee, which should be entitled to the most favorable consideration and which it should be, as a matter of equity, the primary purpose of the law to protect, may be completely lost sight of. No law founded upon such an anomalous proposition can be made successful, nor will capital seeking investment take the hazard of being placed at such a disadvantage as long as any other avenue remains open for the establishing and building up of successful business enterprises.

Valuation. In the event of the Government exercising its right to purchase, or granting a new lease to a new lessee, it is provided that there shall be paid "before taking possession, first, the actual costs of rights of way, water rights, lands and interests therein purchased and used by the lessee in the generation and distribution of electrical energy under the lease, and second, the reasonable value of all other property taken over, including structures and fixtures acquired, erected or placed upon the lands, and included in the generation or distribution plant, and which are dependent, as hereinbefore set forth, such reasonable value to be determined by mutual agreement between the Secretary of the Interior and the lessee, and in case they can not agree, by proceedings instituted in the United States district court for that purpose; provided that such reasonable value shall not include or be affected by the value of the franchise or good will or profits to be earned on pending contracts or any other intangible element."

To my mind this provision contains the most objectionable features of the bill:

(a) *The property taken over.*—It is specified that the United States shall have the right to take over the properties which are dependent in whole or in part for their usefulness on the continuance of the lease herein provided for.

If we assume that which as a matter of fact is open to construction, that it is intended to provide for the taking over of all property owned by the lessee, which may be dependent upon the continuance of the lease, it may be said that the investment of the lessee, so far as the extent of its property is concerned, has been adequately protected. This option which the Government has to take over the property of the lessee should be most explicitly defined as an obligation to take over every species of property which has been acquired by the lessee, and which is used by him in the conduct of his business in connection with the generation and utilization of hydroelectric power.

It is well understood that in the hydro-electric business the development at the power site may represent but a comparatively small proportion of the total investment. Costly lines transmitting power to distant points must be erected; substations installed in which the high-tension current is received and stepped down to a voltage at which it may be distributed to retail customers for the manifold purposes for which the current is used; meters, heaters, and innumerable apparatus installed for the purpose of applying the energy to successful use. All of this property must be protected. It may be stated that such is the intention of the bill, but, if so, it occurs to me that more comprehensive language should be used and the idea definitely specified. Assuming that such is the intention of the bill, it presents an anomalous situation to conceive of the United States Government becoming the retail dispenser and doing an intimate commercial business with the thousands of consumers who are to-day, and will be 50 years from now, using current from hydroelectric developments. This is a fundamental objection to the theory of the bill. A proper legislative program, it is respectfully submitted, should be to grant these developments upon suitable terms that will enable regulation by governmental agencies and not contemplate the actual transaction of business of this nature by the Government.

(b) The provision of the bill that the reasonable value shall not include or be affected by the value of the franchise or good will or profits to be earned on pending contracts, or other intangible element, is particularly objectionable, and whatever may be the argument in support of such a valuation, if the property be taken over by the Government, the deprivation of the right of the lessee to profit by intangible elements of value, when it is contemplated to turn his business over to a new lessee, is little short of vicious. It may be conceded that inasmuch as the franchise is obtained from the government, or directly through some governmental agency, and is therefore a gift of the public, no money value should be placed upon it in estimating the value of the development for the purpose of ascertaining the amount which the government should pay therefor; but it is difficult to perceive upon what line of reasoning the intangible elements which have entered into and given value to a going concern, should not be considered as part thereof, or why the owners of such a concern should not be compensated to some extent because their industry, foresight, judgment and ability have resulted in building up a successful, profit earning venture.

What is meant by intangible property in this connection? What elements of necessary expenditure and undoubted value enter into it? A few will readily occur, such as promotion cost, bond discount, organization cost, interest during construction, taxes during construction, engineering estimates, post construction estimates, fluctuation of prices, managerial ability, and all of those elements not represented by physical property, but which represent a careful, painstaking, conservative conduct of a business. These are as fundamentally necessary as the physical property of the plant itself to make the concern successful. The risk attendant upon the business, the chances taken when money was first invested, developing a new field, the effort in the development and exploitation of that field; all of these represent elements of value as much as concrete walls and iron wheels. A water-power development may be situated in a dense, thickly populated country, where all that is essential to make it profitable is the sale, readily obtained, of its output, and a satisfactory return may be made upon the business. In the West, however, the development may be made in a locality remotely distant from the developed market or where the success of the product is dependent upon the establishment of new business enterprises involving the use of power. Favorable location is such an element of value that it is difficult to appreciate that any sort of valuation can be made without taking it into consideration.

The principles of utility valuation are constantly becoming more settled and definitely fixed. Upon what theory can it be suggested that this entire matter of valuation should not be left to the proper tribunals to be fixed at the time of the expiration of the leasehold, rather than to attempt 50 years in advance, with conditions absolutely

unknown, to measure it by a yardstick? All courts which have passed upon the question, all public utility authorities, whether the discussion proceeded from a legal aspect or as an engineering proposition, agree that it is necessary to take into consideration intangible values in ascertaining and fixing a valuation for the property. The authorities upon this subject are collected in Weir on Regulation, Valuation, and Depreciation of Public Utilities; Whitten on Valuation of Public Service Corporations, section 53; see also Smith v. Ames (169 U. S., 466). Perhaps no better statement of the proposition that intangible values should be considered can be found than that in the paper of Henry Earle Riggs on "Valuation." See Proceedings of American Society of Civil Engineers, November, 1910, page 1520, where it is said:

"It can be readily seen that the physical present value is not always—indeed, is not often—the 'fair value.' The 'fair value' may be more, or less, than the present value of the physical property. It would seem to be reasonable to interpret the court's meaning of the term 'fair value' to be the value as a business or commercial property, taking into account the actual investment existing in the property, together with any favorable conditions which would enable it to earn, on rates which were fair and reasonable to the consumer, an income in excess of a usual rate of interest on the actual investment, or any unfavorable ones which under the same rates would reduce its earnings to less than usual interest. If such an interpretation be allowable it would appear to be correct practice to use a 'fair value' made up of two elements—a physical value, representing the investment, and a nonphysical value, representing all the elements which affect that investment to give it favorable or unfavorable financial returns. Is it not, then, proper to conclude that the nonphysical or intangible value, composed of all these various elements of value, can only be determined absolutely by a study of the earnings and operating expenses? Is not this clearly what the court had in mind in the Nebraska Rate case?"

See also National Water Works Company v. Kansas City, Circuit Court of Appeals (27 L. R. A., 827), at page 836, where Mr. Justice Brewer, in passing upon this question says:

"The fact that it [the water system] is a system in operation, not only with the capacity to supply the city, but actually supplying many buildings in the city, not only with a capacity to earn, but actually earning, makes it true that the 'fair and equitable value' is something in excess of the cost of reproduction."

Farther on he says:

"It steps into possession of a property [referring to the city] which not only has the ability to earn, but is in fact earning. It should pay therefor not merely the value of a system which might be made to earn, but that of a system which does earn."

It seems to me that no sound argument can be predicated upon the proposition that where a private enterprise may be taken over, even though engaged in public utility business, or built upon public domain, without paying something for intangible elements that can not be separated in estimating the worth of the whole property. It is anomalous to contend that at the same cost two hydroelectric developments may be acquired which, so far as physical assets are concerned, would be represented by substantially the same amount of money, but where in one instance the physical property had been made the basis from which, by ability, judgment, risk, and enterprise, a profitable business had been built up, and in the other, where, by inactivity, lack of ability, failure to embrace the opportunity, the development had become a dormant proposition. To announce such a theory is so clearly in opposition to the conclusions reached by business experience, as to cause a mental revulsion at its mere suggestion. If such an economic policy be adopted by our Government it may be safely said that the era of development of water powers in the West has ceased, and the day when attractive possibility was afforded by the opportunity of engaging in the hydro-electric business, and in using it as the instrumentality for developing our natural resources is at an end. To pass the law with this feature embodied in it would, to my mind, be a most grevious error. I do not believe that any hard and fast rule can be laid down regarding valuation. The principles are understood, and surely a problem of the future may be safely left to the courts without establishing, 50 years in advance by legislation, a proposition that will inevitably work a great injustice.

Section 7—Term of contract. Under the provisions of this section the right to contract is limited to the term of the lease, but may at the discretion of the Secretary be extended for a period not longer than 20 years thereafter. It would seem that such a term of contract is not unreasonable, when the contract is entered into in the early part of the lease; but as the term is nearing expiration, the term for which the contract could be made would be gradually lessened so that the forty-fifth year, a contract could not be made for more than 5 years by the lessee, nor more than 25 years with the consent of the Secretary. This provision, I think, will prove a serious obstacle in many cases to the extension of the hydroelectric business.

Business ventures contemplating the building of large plants for industrial purposes, must have some assurance of the power company's ability to continue rendering service. Railroads contemplating the electrification of their lines must be assured of service over a length of time sufficient to justify them in expending the enormous amounts upon apparatus and equipment necessary to carry out the enterprise. If the right of the lessee to make a contract for the delivery of power is limited to a comparatively few years, it will be impossible to extend the business along the lines indicated. I am therefore strongly of the opinion that there should be no fixed limitation on the right of contract, but that a provision should be inserted in the bill providing that the lessee might not contract beyond the term of the leasehold period except with the consent of the Secretary of the Interior. Such a provision will allow suitable discretion, while adequately protecting the public welfare.

Rental charges.—Section 8 provides that for the occupancy and use of lands and other property of the United States permitted under this act, the Secretary of the Interior is authorized to specify in the lease, and to collect, charges or rentals for all power developed, sold, or used by the lessee for any purpose other than in the operation of the plant. The rest of the section provides for the disposition of the fund. This provision is open to serious objection.

Basing a charge upon the developed water power as a rental for the use of the lands occupied is clearly an attempt to tax the right to use the water, and not a tax based upon the valuation of the site as land. The question as to how far the rights of the United States, as a proprietor of the public domain, extend to running water, has no doubt been fully discussed before the committee, and inasmuch as to attempt to discuss this principle would necessitate the making of this letter unwarrantably long, I will refrain from commenting thereon, further than to state that in my opinion it is inequitable for the Government at this late day, when the power of regulating rates has become so firmly established, to impose upon those who seek to develop water powers, a tax to which their competitors are not liable, and moreover, that as a governmental policy, the wisdom of making such a charge is seriously to be doubted.

The charges, whatever they may amount to, must be added to the fixed expense of running the plant, and must be taken into consideration in establishing rates. Allowance must be made by the rate-making authority for these charges, and thus an indirect tax is imposed upon the consumer. It is not in accord with the generally accepted theory of taxation to delegate to any officer the authority to levy taxation. The authority delegated to the Secretary of the Interior under this section would unquestionably give that official authority to levy indirectly upon the consumer such a tax as would be necessary to meet the charges made by the Government for the use of the power site.

This vexed question has been made the subject of much discussion. With its discussion, you and the committee are undoubtedly familiar. To say the least, the wisdom of adopting such a policy is seriously to be questioned.

Respectfully submitted.

C. F. KELLEY.

ADDITIONAL STATEMENT OF MR. GEORGE OTIS SMITH, DIRECTOR OF THE UNITED STATES GEOLOGICAL SURVEY, WASHINGTON, D. C.

Mr. SMITH. Mr. Chairman and gentlemen of the committee, I am especially glad of this opportunity to follow Mr. Ryan, because, as I remarked to him this noon, I think that I am looking, or trying to look at this subject more from his practical point of view than I can look at it from the point of view that has been presented by some other gentlemen who have appeared before the committee.

I must confess, first of all, that I am not sympathetic with the view that has been expressed before this committee that you, as legislators, must give primary attention and almost sole attention to laws already on the statute books. As I look at it the proposition before us is to consider legislation that is different from and additional to laws that we already have, and that is my only reason for speaking before the committee, that you are considering this new type of legislation.

If we are to be bound down by such a limitation as that suggested, based wholly upon laws passed and decisions already rendered, I fail to see how we can make the progress that is absolutely demanded, I

believe, by the conditions in the public land States. As I stated the other day, we seem to have outgrown several of the laws that are the only ones that at all touch upon the public lands questions to be decided. I told Mr. Short yesterday that I thought possibly the difference of point of view between his legal mind and my lay mind on this matter is that he thinks that what can not be done ought not to be done and I think that what ought to be done can be done.

I want to speak, first of all, about the monopolistic character of public utilities. That is not a new idea to this committee, but I think we must assume that it is a somewhat new idea in our American institutions, and with that idea of monopoly of course there goes and is involved the idea of the public obligation of control by the people.

While discouraging competing developments in the same field we must not shut out the opportunity for competition but hold fast and keep open the opportunity for competition. While agreeing that competition may be altogether wasteful, I think we will need to add to that statement the fact that the fear of competition may be an incentive, both to efficiency and economy. There is need of what may be termed potential competition. Such potential competition by municipal ownership is already provided for in some of the State statutes, and that idea of possible public ownership at some future time is present in this bill which is before you.

Now, first, about the larger units, and what goes with larger units, the comparatively lower costs of operation. This I think we will agree is the enlightened public policy; and perhaps one of the best studies along that line is an address which was delivered by Samuel Insull, the president of the Commonwealth Edison Co., of Chicago, last April in NewYork. I have been interested especially in this study because I believe it is the presentation of the case by an optimist who has the facts. There is more detail in his address than you would care to consider, but I would like to call your attention especially to certain points which he makes, and first of all one with regard to his own company in Chicago, showing the change which has taken place in recent years in the ratio between output of electric energy, that delivered to the people of Chicago, and the investment that makes this possible.

The change, in a word, has been that while in the 10 years his company has quadrupled the investment, it has increased its output about fifteenfold. This means that while in 1903 the one-dollar investment yielded 3 kilowatt hours, in 1913 this ratio was increased so that one dollar of investment gave 10 kilowatt hours. That is one measure of increasing efficiency. Of course in a city like Chicago that improvement has come about by increasing the per capita consumption of electricity, and at the same time that they have been increasing the per capita consumption they have been lowering the unit cost and the unit income from the electric energy sold.

Senator CLARK. I did not get that last statement.

Mr. SMITH. At the same time that they have increased the per capita consumption they have lowered the income per kilowatt hour lowered the price to the people.

This rule holds not only in Chicago and certain other cities but, as I will show you in a moment, it holds also in the States. It is characteristic of electric-power development that the larger the business

the lower the price can be put; not simply as this is true in many other lines of business, but here there is, of course, the added element of bettering the load factor by diversity of use that comes in and decreases the unit cost.

Senator CLARK. That is the notion of large sales and small profits.

Mr. SMITH. Yes, in part. They can lower the cost very materially, as is seen in that one case. They have done that not simply by getting more out of each pound of coal, but they have done it by decreasing the operating costs all along the line.

The Niagara region, of course, has a better showing than Chicago in the cost of electricity and so has also San Francisco. San Francisco and Chicago are much alike in the per capita consumption, Chicago having a little over 300 kilowatt hours per capita and San Francisco about 300.

Senator CLARK. Chicago is all steam, is it not?

Mr. SMITH. Chicago is all steam and San Francisco part steam and part hydro.

The average income for San Francisco is a little less than 2 cents, while in Chicago it is a little more than 2 cents per kilowatt-hour. At Niagara it is less than 1 cent. By income I mean the average return per kilowatt-hour sold.

Senator NORRIS. Have you any figures for Cleveland, Ohio? I have read a good deal about that.

Mr. SMITH. Mr. Insull has tables that give the facts for most of the cities, but I find that Cleveland is not included.

Senator NORRIS. I have seen newspaper accounts recently that Cleveland was about to install some new system, I believe, or to take over some system, and that they were going to produce or do produce electricity at a very low cost.

Mr. SMITH. Both in output per capita and price per unit sold, Niagara leads with San Francisco second and Chicago, in most respects, following.

Senator NORRIS. Can you give the rates in those cities to the consumer—what the residents of the cities have to pay?

Mr. SMITH. No. This is the average, of course, of the lighting rate and of the different power rates and of the municipal rates, all put together—an average. Of course that information is available and could be inserted in the record for a few of the larger cities, if you desire.

Senator NORRIS. If you can do that without any great amount of trouble, Doctor, I wish you would.

(The rates referred to are as follows:)

Residence lighting rates in some cities of the United States.

City.	Rate in cents per kilowatt hour.	Minimum monthly charge.	City.	Rate in cents per kilowatt hour.	Minimum monthly charge.
Washington, D. C.	10	$1.00	Denver, Colo.	9	.....
New York, N. Y.	10	Variable.	Salt Lake City, Utah	11	$1.00
Buffalo, N. Y.	7	.....	Boise, Idaho	9	.....
Birmingham, Ala.	10	Variable.	Spokane, Wash.	10	1.00
New Orleans, La.	14	.....	Seattle, Wash.	6	.50
St. Louis, Mo.	10	.....	Tacoma, Wash.	6	.50
Cleveland, Ohio	8	.....	Portland, Oreg.	9	Variable.
Cincinnati, Ohio	10	.....	San Francisco, Cal.	7	.....
Milwaukee, Wis.	12	.....	Los Angeles, Cal.	5½	.65
Helena, Mont.	11	1.00			

NOTE.—Seattle and Tacoma, Wash., are partly supplied by municipal plants and Los Angeles has plants under construction.

Mr. SMITH. Coming now to the States and taking, first of all, Montana, the State of which Mr. Ryan has just been speaking, we find that it is true that the influence of hydroelectric development as shown in Mr. Insull's tables. Water power develops a large market, and this makes possible low costs, and vice versa. The two in a way go together. Montana leads, with a per capita consumption of over 1,000 kilowatt-hours and an income of something slightly in excess of 1 cent per kilowatt-hour. Nevada follows, then Idaho and California. In all those States we find that the same thing is true, that there is a large per capita consumption and a low income to the company and low cost to the public per kilowatt-hour.

This is not simply the effect of large sales and consequent low unit profits, but you have with the large sales the diversity of market which afford a favorable load factor, Montana leading, as I understand, in load factor as well as in the per capita consumption. This all comes down to the proposition of what has been stated by almost every witness before this committee, that you need to have the large centralized plants and with them the large diversified markets, and that necessitates a natural monopoly.

Taking that ratio between the invested capital and the output of hydro-electric energy, I found some figures in a recent opinion of the Railroad Commission of California, a decision to which Mr. Britton, of the Pacific Gas & Electric Co., called my attention, and from what I find there, in this connection, I figure that for the whole generating plant of the Pacific Gas & Electric Co., segregating the hydro plants from the steam plants, the one dollar investment in hydro plants gives 27 kilowatt hours while the one dollar invested in the steam plants gives only 20 kilowatt hours, a showing, however, that I believe is a very good showing for steam. Of course this can not be compared with the ratio I gave for Chicago, because these Pacific Gas & Electric figures do not include transmission and distribution. However, the 1911 figures, including transmission and distribution, for this company in San Francisco alone, showed that the ratio there was 6 kilowatt hours sold to one dollar of investment. The similar ratio figured for the Montana Power Co. would be something like 15 kilowatt hours to one dollar of investment.

These figures, to me at least, prove rather conclusively the advantage to the public in having large units of operation as well as the superiority of hydro-electric generation over steam. But of course this great desirability of large units, which enjoy a monopoly of a certain territory, means that there must be some public control, and the larger the monopoly the stronger the control, and it is for that reason that you are considering, as I understand it, this proposed legislation.

About four and one-half years ago when I was before a Congressional Committee, I made some statements regarding the economic advantages of large units of operation, and I was asked if I favored that kind of operation, and in answering that I did I added, of course, this necessity of public control of price; and I was then asked if there was any article in which there was public regulation of rates, and I mentioned transportation. I was then asked whether there was any other. Well, I was stumped and could not mention anything else that was effectively regulated as to its price by any agency of the public.

Now, that was not simply my own ignorance in the matter, for if you will look back for only four or five years you will find that there was at that time very little rate regulation in this country. It is a new proposition, although at the present time, as has been stated, there are a considerable number of the States that exercise a more or less complete control over rates of public utilities.

Senator NORRIS. In that connection, I would like to inquire if you can answer—you need not answer it now, but at any time it will suit you—whether you have made a study of the laws and method of control of hydroelectric energy in Switzerland?

Mr. SMITH. I think something regarding Switzerland was put into the record of the hearings before the House committee. (See pp. 524–531). But some years ago there was a paper on the subject published by the Geological Survey, about four years ago, and at that time I read it very thoroughly before its publication.

Senator NORRIS. In that country is there a great deal of authority vested in a commission?

Mr. SMITH. I could not say how great. I will make a note regarding that and will introduce it just at this point, but I could not say off hand.

NOTE.—The Swiss legislation on the subject of the development of water powers was discussed in Water-Supply Paper 238, United States Geological Survey, pages 52–59. The legislative tendency in the various Cantons varied from the nationalization or monopolization of water powers to leaving the whole matter to private initiative. The amendment of October 25, 1908, providing for Federal intervention in Switzerland, was adopted by a popular vote of 292,997 against 52,180. This amendment is as follows:

ARTICLE 24b. The Federal Congress shall have supervision over the development of water powers.

The Federal Congress shall make provision for the disposition of water-right concessions, shall prescribe the terms thereof, and shall regulate the transmission and distribution of electrical energy so far as may be necessary to protect public interests and to provide for the proper development of such resources.

All water rights to which the terms of the Federal law do not extend shall be under the jurisdiction of the Cantons, which shall dispose of the concessions, regulate the same, and impose taxes and fees for their use, but such regulations, taxes, and fees shall not be so severe as to prevent or inhibit the development of water powers.

The National Government shall regulate and dispose of concessions for powers located on intercantonal and national boundary streams, and shall determine the taxes and fees to be imposed thereon, after hearings have been granted to the Cantons interested, but such taxes and fees shall be collected by the Cantons.

No power developed on a stream located within the Union shall be transmitted to a foreign country without the consent of the Federal Council.

The provisions of the Federal law shall apply to water-right concessions already existing, except in cases specifically exempted therefrom by law.

I have a great deal of confidence in the efficacy of State regulation through the public utilities commissions, but we must admit, as we review what has been done, that while great progress has been made, at the same time it is true that the whole matter is somewhat in the air, and there is a certain indefiniteness and uncertainty, even in the decisions of what some of us might regard as the best commissions. They are naturally feeling their way, although I believe, from reading a number of decisions of several of the commissions, that there is a certain common trend in these decisions.

Senator WORKS. What reason have you to think that the Secretary of the Interior would be a better agency for regulation than the commissions that have been provided in the States? Would there be any more certainty or reliability in that sort of regulation than that which we now have?

Mr. SMITH. I think that possibly it would be better to say the Secretary or such other Federal agency as might be provided for by law; that being the provision in this bill, as I remember it.

Senator WORKS. Well, giving it that extended construction, what reason have you to think that an agency provided by the Government would be any better than one provided by the States?

Mr. SMITH. I think that in some cases—and I mentioned one in my testimony the other day that was altogether and somewhat extensively interstate in character, the corporation belonging to one State and having its principal office in a second State, generating its power in a third, your State, and selling its power in a fourth State, Nevada—it is doubtful in my opinion, whether any one State could really effectively control that, although in this particular case of which I speak Nevada is fixing the rates at which all the output of that company, or essentially all of it, is being sold to the consumer.

Senator WORKS. In that case you are confining it to interstate business and putting it upon the ground of the necessity for some action besides that of the State, not because of its inefficiency but because of the condition that makes it necessary for the Federal Government to intervene.

Mr. SMITH. And I think, Senator Works, that the tendency is more and more toward interstate development by reason of the fact that we are having this concentration—and an economic concentration—of operating companies under one head, that concentration being no less obvious in a physical sense than it is in a financial sense. Already one of the companies which has been represented here is operating in three States.

Senator STERLING. You would not contend, would you, Dr. Smith, that in a State where they have a public utilities commission the Federal Government should control and regulate outside of interstate business?

Mr. SMITH. I do not think they would have any need to do so. I like to play safe in these propositions, however, and I fail to see that there is going to be in State and Federal regulation any danger to the public—and by "the public" I mean the man who invests in the securities of the company just as much as I mean the man who buys the service and the energy from that company. I do not believe there is going to be any injury done or even any danger of injury being done by what might be called double control. I do not expect conflict in such control, although I think that there is a better chance and a better assurance of omplete control.

Senator CLARK. Well, Dr. Smith, has there not been a conflict in a kindred matter, on the control of the volume of water between the States and the General Government, each asserting the right to control?

Mr. SMITH. Yes; that is true.

Senator CLARK. And if there is a conflict on that it seems to me there is all the more likely to be a conflict in the other matter where the rights are not so clearly defined.

Mr. SMITH. I think, Senator Clark, in reply to that, that there may be a dispute; but I doubt if there is any conflict of real interests.

Senator CLARK. Of course a dispute is what I mean by "conflict." A conflict is a dispute. Where two parties are disputing as to the

rights, each for himself, it occurs to me that that is a conflict which is settled either in the courts or in some other way. When I speak of a conflict I mean a dispute.

Mr. SMITH. I was using the term "conflict" in a rather refined sense. I mean a conflict of real interests. I believe there is a practical solution of every conflict of interests.

Senator CLARK. I was speaking of the conflict of jurisdiction.

Mr. SMITH. And I think that in a case like that you mention eventually that is going to resolve itself into the interstate body having superior jurisdiction to any one intrastate body, it being essentially a conflict between the States.

To bring about this public control there are a number of means that must be used. It seems to me possibly this is the one of which we think first, as deserving first attention, namely, that of rate regulation. There are some things, however, that rate regulation will not cure, and publicity is a pretty good protective measure against a number of these evils. And therefore there are some provisions in the bill, the simple purpose of which is that a showing might be made before the Secretary of the Interior or some other body representing the Government.

One of these sections relates to transfers of leases. Of course I will admit that I think the bill as it was reported to the House, which permitted transfers for financing purposes, such as mortgages on the properties for the purpose of development, was in better shape than it is at the present time, where there is provided more of a prohibition against all kinds of transfers. But there is need of some one to review the transfers that may be made before development.

When I was before the committee a few days ago, I referred to this matter of "pocket peddling," and the difficulties encountered simply in trying to administer the law which we now have on the statute books. Some of us have become familiar enough with applications for permits which came from men who simply were trying to get something that they could sell to the real developer.

Now, I do not think that is the purpose of the present law, nor do I think it is good practice or that it benefits any class of citizens, except the one individual who will be able to sell something which costs him little or nothing. There needs therefore to be some review of transfers or else you will encourage the first man who comes and aid him in getting something which he may have no intention of using, except for the purpose of transferring it at an unearned profit to the real developer.

A good deal has been said regarding the 50 per cent provision which, first of all I may say, as it was reported to the House, was not mandatory. I have reference to the provision against more than 50 per cent of the output being sold to any one consumer or customer. It was not mandatory, but simply permissive. It could be made a better provision, in my mind, if it were changed to make it 50 per cent not of the output but of the capacity of the plant. That is the way we had it written into the Pend d' Oreille permit, the permit concerning which there were held quite a number of conferences with the representatives of the Secretary of the Interior, as well as the Secretary himself, and an engineer who represented the applicant company, this engineer being also the chief engineer of the Montana Power Co., of which Mr. Ryan is the president.

The purpose of that provision, I think, can best be expressed by just a few words which are given by Secretary Lane in the House hearing, in which he said:

You will remember, Mr. Chairman, that we had up a proposition of similar character in regard to the Pend d'Oreille power permit in eastern Washington, where they purposed taking a large power project and using it entirely for the development of a nitrogen plant. And there were in the neighborhood some mines and some stamp mills, and there were growing towns in the neighborhood, and the question was whether that supply, which was the only available supply in the neighborhood, should be given over entirely for the use of the nitrogen plant or whether some of that power could be used for the development of near-by industries; and that was the reason that the 50 per cent proposition was put in; it was put in that Pend d'Oreille permit and the, as you say, some of the irrigation Senators thought that a mill man could use this plant exclusively for his own industry, and that while it might come under a State public service corporation law, it would in effect be nothing more than a pipe line is now, a means of conveying oil from a well down to a refinery, exclusively used by the refinery itself.

The CHAIRMAN. Dr. Smith, Mr. Ryan has asked the privilege of making a correction concerning this engineer of whom you speak.

Mr. RYAN. You made reference, Dr. Smith, to the engineer who negotiated the Pend Oreille permit in connection with the Montana Power Co., and you stated he was chief engineer of the Montana Power Co. I would like to have it go into the record that he was not the chief engineer for the company, but was consulting engineer for the company and was not acting for the Montana Power Company in these negotiations. I heard it stated that he was acting on behalf of the power company, and I wanted the record straight.

Mr. SMITH. I want to get the record straight. I would like to add to that that I never for a moment understood or thought that this application for a permit had anything to do with Mr. Gerry's connection with the Montana Power Co. I was stating his connection with the Montana Power Company rather as a statement of his standing as an engineer, and that was because of having been associated with him in connection with the other applications that the Montana Power Company had before the department. Mr. Gerry was not in any sense, in my opinion, an interlocking engineer.

The danger, looking at the whole matter from the public interest, of the whole of the output of a power plant going to one customer, or being used in one industry, possibly may involve a real danger to the public, or may involve a great benefit. It should not be prohibited, therefore, but I think there should be provision made as a matter of safety, simply for a review as to the use to which the power is to be put.

I have had an opinion of my own regarding this from the fact that in my own town in Maine I have seen water power being devoted to grinding wood pulp, which is a use that consumes relatively a large amount of power; that is, the ratio between the power and the workman is about 85 horsepower to 1 man, which, as you know, is altogether different in many other manufacturing industries. The same quantity of power might preferably be made the basis of an industry employing several hundred rather than a score or two of workmen.

The same ratio holds between nitrogen fixation and irrigation. In the former the amount of power to the workman is not less than 100 horsepower. So far as I can make out, the power that would incidentally involve the employment of one man in a nitrogen fixation

plant would be sufficient to irrigate a number of ranches. I think that this is not simply theory, but it is good practical public policy for these matters to be considered when you are trying not simply to use water power but through the use of water power to develop new communities in the Western States.

Senator CLARK. Is not that largely regulated by State laws, particularly in those Western States which prescribe the uses to which water shall be put and put a preference on the applications?

Mr. SMITH. There may be some commissions that might have such jurisdiction.

Senator CLARK. No; but that is not what I mean.

Mr. SMITH. You mean the use of it? They would not distinguish between an appropriation of water for power that is going to be used for running a mill and power that is going to be used for irrigation pumping.

Senator CLARK. Oh, yes, they would.

Senator SMOOT. They do in my State.

Mr. SMITH. I do not mean for direct use in irrigation, but I mean the development of hydroelectric energy that is going to be transmitted, possibly, into another State and there used for pumping. Of course I did not intend to bring up the two uses of the water itself, one for developing power and the other for irrigation.

Senator CLARK. Do you make a distinction between water for irrigation purposes that is put on the land by gravity and that that is put on by pumping?

Mr. SMITH. That was not involved in the distinction; it was the distinction between the power that would be used right at the site, for instance, 150,000 horsepower, it might be, for a nitrogen fixation plant, and the same amount of power, or some part of that output of power that could be sent a few miles down into the valley for pumping underground water or surface water onto the land.

Senator CLARK. Well, I was referring only to the appropriation of water; I was not referring to the underground water.

Senator SMOOT. Do you think that the Secretary of the Interior ought to have the power to say what manufacturing institutions shall be created in any district?

Mr. SMITH. Oh, no; I do not think that necessarily, Senator; but I do not think that any harm is going to come to Montana or Utah if some one considers those matters in behalf of the people. After all, it comes right down to whether those matters are going to be decided by representatives of the people or representatives of the corporations.

Senator CLARK. Who do you consider are the representatives of the people—the Secretary of the Interior or the Congress of the United States? If it comes to that, it occurs to me that they are public officers, and I do not think that it ought to be assumed that parties who do not agree with any one particular line of regulation are necessarily working against the interests of the people.

Mr. SMITH. Right here, Senator Clark, it seems to me that in the passage of this law the representatives of the people are those that are called Representatives; but after the law is passed and the policy is determined it seems to me that under that law the representative of the people is the executive officer.

Senator CLARK. It may be an executive officer or it may be an executive board.

Mr. SMITH. Oh, yes.

Senator NORRIS. It would be whatever had been provided for in the law.

Mr. SMITH. Yes.

Senator CLARK. Certainly, but the question was as to what we should provide, and the agency that we should provide.

Mr. SMITH. It is to that end that I am addressing myself to this 50 per cent provision about which there seems to be some conflict of opinion. I do not consider it a vital element in the bill. I think it is well enough to have it in the bill. It is along the line of trying to get the most out of the water power, and I doubt very much if there would be any conflict between the executive officer and the power-developing company in that matter if the executive officer is given discretionary power.

I think that would be offset by other considerations in agreeing upon the terms, as in the Pend d'Oreille permit. There was a discussion of that very point with the engineer, and it might have been that he suggested, for instance, that it should not be 50 per cent of the first unit developed, but that it should be 50 per cent of the capacity of that plant. That permit went into particulars a little more, saying that there should not be 50 per cent sold to any one consumer while there were smaller applicants for this same power. It is just simply an attempt to provide for the small user as well as the big user.

Senator SMOOT. You are well acquainted with the southern part of Utah. No doubt you have been there at the Beaver plant. And now, when the power plant was first erected all of its power went to the Newhouse mines.

Mr. SMITH. Very properly.

Senator SMOOT. You know this, that there is not a power anywhere in the southern part of the State within reach of that plant itself that would take more than 10 or 15 per cent of the total capacity of the plant. Now, supposing that the law in existence at that time prevented that company from selling any more than 50 per cent of its load to one concern; you know very well it never would have been built.

Mr. SMITH. In my opinion, Senator, such a law should not be passed which would have a prohibition of that kind. But I think that there would be no danger, and I think there would be real advantage if the policy was expressed in the law giving discretion in this matter to some executive officer or board. Take the Montana plant as an example. Take such a case as was stated by Mr. Ryan. I think that if I were a subordinate of the executive officer or board and was asked for an opinion regarding the delivering of 90 per cent of the capacity, even, of that plant to one user, the chances would be that I would agree with the engineer representing the company and would agree to such a proposition. I might not, however, agree to a 95 per cent or 98 per cent delivery to one company, and when the matter was discussed I do not believe that they would request it.

Senator SMOOT. You may not be Director of the Geological Survey, and there might be another Secretary of the Interior that would not agree to more than 50 per cent, and that whole proposition would have been turned down cold.

Mr. SMITH. I think in most of those positions, both in the executive and advisory capacity, there are as good if not better men waiting than those who happen to hold some of these positions now.

Senator SMOOT. I doubt it, but however wise they may be, it may be a man who has different ideas and thinks that the world ought to come to those ideas, that he is going to force the world to come to them if he is in position to do so.

Senator NORRIS. What would you suggest, Senator Smoot, in a case like the Pend d'Oreille plant, where there was not enough power to supply everybody, and one big company wanted it all? Would you let them have it?

Senator SMOOT. I would rather let the one company have it than to have nothing at all, which was the result.

Senator NORRIS. That is not the question. It is not a question of whether you would have nothing, but whether you would let the one company have it all or supply several of them.

Senator SMOOT. If I am correctly informed, there is any amount of power besides this.

Senator NORRIS. That may be.

Senator CLARK. I want to call your attention to an instance that was just cited.

Mr. SMITH. In this particular case I think 50 per cent is enough for the nitrate plant that might be located there.

Senator SMOOT. You may think so, but the other parties may not think so.

Mr. SMITH. In the case under consideration it was agreed between the interested parties that this was a workable permit.

Senator CLARK. I want to ask you this question: In Mr. Ryan's case there are very exceptional facilities for developing a very large water power. The concerns that built a distributing company over there where he made his contract has a very large use for electricity. Now, suppose the possibility for development was coincident with the desirability for use for the one company, and there was no more power; that it exhausted the utmost development of the power to supply the one company over at Butte, the one consumer at Butte, which would save that consumer, as he says, from $2,000,000 to $4,000,000 a year; in that event would you limit very greatly the authority to dispose of what that customer needed?

Mr. SMITH. I would not limit the power of the executive officer in that particular. I would express, possibly, the policy—and as this bill was reported to the House it was not mandatory, but simply left some discretion. In that particular case, and I think in some other cases, it might be agreed that 100 per cent ought to go to the one consumer. I think there are other cases where a power plant like that should not pass by the possibilities for irrigation with ground waters such as in the case of the Prickly Pear Valley—I believe it is in your State, Senator Myers——

The CHAIRMAN. Yes.

Mr. SMITH. Where there is a very good and efficient use being made, and which is furnished with power, and furnished by the Montana Power Co.

Senator SMOOT. Are they furnishing all the power that is necessary for the irrigators in that valley?

Mr. SMITH. I think under present conditions probably they would like to have some more customers.

Mr. MITCHELL. I would just like to say that the Montana Power Co., through its subsidiary, the Montana Reservoir & Irrigation Co., not only furnished power to pump water, but has taken water out of its own reservoir that it has built, which in turn is filled from the large reservoir at the head of the Madison River. They have installed the pumps, built the canal, and taken the whole investment, and are delivering water upon the land at so much per acre-foot.

Senator CLARK. That is per annum?

Mr. MITCHELL. That is per annum, and they deliver that water at $1.75 per acre-foot per annum. The whole enterprise, from beginning to end, except the ownership of the land, is an enterprise of the Montana Power Co., through itself as a power company and through its subsidiary as an irrigation reservoir.

Senator CLARK. The owner of the lands, then, has no water right?

Mr. MITCHELL. The owner of the land supplies the water under contract to the Montana Reservoir & Irrigation Co., which is owned by the Montana Power Co.

Senator CLARK. The owner of the land has no water right that he has acquired from the State?

Mr. MITCHELL. None at all.

Senator SMOOT. You say you are charging $1.75 per acre-foot per annum?

Mr. MITCHELL. One dollar and seventy-five cents per acre-foot per annum.

Senator SMOOT. That is about the same as the continual charge of any other irrigation system in any of the Western States.

Mr. SMITH. Using gravity water.

Mr. MITCHELL. It is not excessive, compared with gravity water.

Mr. SMITH. That in itself, it seems to me, is an argument for leaving in the executive officer or board sufficient discretion in the administration of this law so that he or it can distinguish between an applicant who has not behind him much if any engineering or much if any financial resources, and a company like the Montana Power Co. that has shown its ability to carry out a project like that in the Prickly Pear Valley.

The public-control policy, it seems to me, is at the present time in the period of transition, which fact in itself possibly leads to the need of the legislation now before this committee being regarded as pioneer legislation. Now, take the matter of physical valuation or any valuation. The idea of a physical valuation of public utility plants of all property of this type is coming, but I do not think that we can say that it has arrived.

Senator SMOOT. That is, you mean as a basis for making rates?

Mr. SMITH. Valuation, I might add, Senator Smoot, for any purpose. I do not think that we should have one valuation for capitalization, another valuation for tax assessing, another valuation for taking over or recapture, as it has been called, and still another valuation for rate fixing. It seems to me that rates should be fixed, securities issued, taxes levied, and property taken over on the same type of valuation. I realize when I say that, that some of the commissions have made a distinction and have said, "We are treating now simply

of the rate-fixing valuation, or the valuation for the purpose of rate fixing." But I do not see where you can draw the line. In fact any other reasoning is simply reasoning in a circle. The rates depend upon the valuation and the valuation upon the rates.

Senator SMOOT. You would not say the purpose of taxing, because that is entirely within the State.

Mr. SMITH. I am speaking of valuations that have been made by the State commissions.

Senator STERLING. Then, Doctor, you would not quite agree with the provisions of the bill in regard to the value at which the property should be taken over?

Mr. SMITH. I will come to that, Senator, in a moment.

Regulation of rates is based on the principle that the investor, as I understand it, should have a fair return on his investment. In other words, the rate shall be fair to both parties, the investor and the consumer. It seems to me that when we talk about valuation we should take the broad view that it must be fair to both and not discuss it simply from either point of view alone. I think that we are representing the investing public just as much as we are representing the consuming public, and being fair to either one necessitates being fair to the other.

The question of rental has been simply touched upon. I think it is probably the least important, although possibly the most feared part of the whole proposition in this bill I do not believe in this matter, however, that we must consider it necessarily always a tax on the consumer. Theoretically, yes; but practically, no.

I had the case of the Nevada-California rate lately fixed by the Nevada commission looked up, taking that case simply because it gave some statistics of distribution to different kinds of consumers, and in that way the revenue of the company, and I find that the highest charge under any regulations that have been considered in the past would amount to only a quarter of 1 per cent of the capital. That is the highest. When it comes down to expressing that in terms of kilowatt hours, the maximum possible Government charge would amount to twelve one-thousandths of a cent per kilowatt hour, and, as a matter of fact, taking the maximum charge that has ever been assessed under Federal regulations by the Forest Service, this would amount to less than three one-thousandths of a cent per kilowatt hour. I doubt if that would have any influence one way or the other in rate fixing. But in my opinion—and this is simply a personal opinion—the more important purpose of this bill is not to gather in revenue for use in the Western States or for turning over to the States, but it is to afford control of the development in the interest of the people most vitally concerned.

Senator SMOOT. Right in that connection, you would not hold that a dollar a horsepower would make any difference in the contract that the Montana Co. made with the railroad people, would you? Their contract was $21.

Mr. SMITH. That would be 5 per cent, you see. That would make a difference.

Senator SMOOT. That is one proposition that came before us to-day. Now, is it not a fact that it would make a difference in about three-fourths of all the power that was sold by all electric companies?

Mr. SMITH. I think it would in that case, but we are taking an extreme case at a larger rate than I think would be necessary or desirable.

Senator SMOOT. Well, now, take another firm purchasing power from any western concern. Well, take my own State, and take the smelting plant as an example. That is perhaps the largest user of power in that State. Suppose they had to pay $2 instead of $1.

Mr. SMITH. That is a $25 rate?

Mr. MITCHELL. Twenty-seven dollars and fifty cents on the 100 per cent, with a guaranty of 80 per cent—80 per cent of which $27.50 is a guaranty.

Mr. SMITH. I should consider, Senator, that that would not affect an existing contract, but of course it would affect a renewal of such contract.

Senator SMOOT. Exactly. And so it would be with every mining company in our State which uses electric power.

Mr. SMITH. However, as I stated, I do not see that that small fraction would affect——

Senator SMOOT (interposing). It may not affect a person who was using a few lights or a half dozen lights in a home.

Senator NORRIS. I would like to ask you, Doctor, right in that connection, in the case you have been speaking about, namely, this big contract with the railroad company, where they pay $21, suppose the amount of the tax that they pay to the Government was deducted from the $21, that would make it $20, would it not?

Mr. SMITH. Yes.

Senator NORRIS. Now, what I wanted to ask you is, Can you figure out and tell the committee how much benefit the real consumer, the man who travels on the railroad, would get, if any, as a result of that whether he would pay a cheap fare, how much he would get his rate reduced, if that were made $20 instead of $21?

Mr. SMITH. I do not think it would reach the ultimate consumer. But a better case is to take a case where the ultimate consumer is nearer, and to go back to the Nevada case, where the very lowest rates for the very largest user of power, being a mining company in Nevada, at Tonopah or Goldfield, is 1.14 cents per kilowatt hour. The maximum possible Government charge on that would be twelve one thousandths of a cent, and the largest that has ever been made would be three one-thousandths of a cent. I do not think it would affect that rate.

Senator SMOOT. Of course those figures seem small in kilowatt hours, but when it gets down to horsepower per year you can see that it is.

Mr. SMITH. However, the percentages would be the same in kilowatt hours as they would be in horsepower per year. It works out the same, no matter what unit you take. The percentage is the same in either case.

Now where that would come in is in the fact that the commission rates—and I was quoting the price from the order establishing those rates—are high enough so that it allows a return of 17 per cent on the capital. In that connection, there not being present any Senator or any governor from Nevada, I think I ought to put into the record a statement of facts regarding the market for this power delivered by the Nevada-California Power Co.

The Nevada mines are not going down in importance. The bullion value of some of the ores may be somewhat less, but the tonnage of the ores handled – and in this I believe Mr. Ryan will agree with me – affects the consumption of power more than the high grade of the ore. The low grade proposition is apt to be a better consumer of power than the high grade. The tonnage of ore in those two counties, Nye and Esmeralda, has been going up right along. I have the figures since 1908, up to 1914; that is, I have the last as reported for 11 months, and estimated for the present month of December; 1914 shows the biggest tonnage in both those districts, Goldfield and Tonopah, for any year. As a matter of fact, the electric market in those districts is not made by the users of light. The demand for electric current comes from the users of power. In other words, it is the mills and the mines that are using over 90 per cent of that power, and the tonnage has been going up right along. The value per ton of ore has been going down, in some cases, and that is what has given rise to the idea that in these two counties, Esmeralda and Nye, there are only mining communities of the past. They are very much mining communities of the present. So it is that the revenues of the Nevada-California Power Co. show a very good relation in that these have increased steadily during these years. Of course, I have only their 1913 figures, but their revenue then was just under $1,000,000, whereas back in 1908 it was about $700,000.

Senator SMOOT. Of course a great deal of that comes from extensions, I think you will admit, and all I was talking about was—and Mr. Merrill so understood it – that the mines had decreased in the amount of power consumed for which the line was first built. I understood it right along, and I have never heard it denied before.

Mr. SMITH. That statement was made by the defendants in this hearing regarding this particular rate, and the commissioners denied it, as they had denied it also in the case of Ely, where the same argument was used. In the two camps, Tonopah and Goldfield, there are more producers and the tonnage is larger in those two camps now than ever before. When you say Tonopah and Goldfield, you are speaking of practically the whole of the two counties.

Senator SMOOT. The amount of power used would be greatly dependent on what depth they had to raise their ore from.

Mr. SMITH. Yes; from what depths they would have to raise it.

Senator SMOOT. That, no doubt, would bring it up, but I do not see why they go to work and refer always to the Nevada Commission to demonstrate the rates that will always be established by a public utilities commission. Everybody knows why those rates are high. The commission understood it and so stated, and nobody would go there and run a chance in running a power line and making the expense that they did into a mining camp without they had a good rate. But there is not another State commission anywhere in the United States that allows them to make 17 per cent.

Mr. SMITH. One reason for that high rate of return on investment is that they have rather low costs for that power. They can earn a higher rate at a price that is not exorbitant in itself.

I will agree—although the commission does not need to have me agree with them—that it is a fair rate, even if it is 17 per cent, because when that money went in there it is no question but what it

[illegible] proposition. But it has turned out the other way, [illegible] been a 100 per cent return.

[illegible] They bet on the life of the mines, and they won. [illegible] however, a future, as well as a past and a [illegible] that any Federal tax that might be levied [illegible] would be taken out of the 17 per cent [illegible] not be taken out of the consumer.

[illegible]. Not in that case, I frankly admit.

[illegible]. Are there are other such cases, I suppose.

[illegible]. I do not know where they are.

[illegible]. In connection with this mining market, I think [illegible] can not be placed upon the large public service [illegible] power development by bringing down the [illegible]. I may be repeating the very point that Mr. Ryan [illegible] but it is one that I have expressed myself on [illegible] Secretary of the Interior on an application for a [illegible] namely, that by making power cheaper you are not [illegible] make an increase in the possible return per ton of [illegible] going to open up a larger body of ore than otherwise [illegible] brought to the surface. You are going to increase [illegible] metallic resources of that particular country by [illegible] the cost of extraction, and thereby increasing the [illegible] and market value which will eventually express [illegible] ably larger tonnage of ore from that mine. And [illegible] the very best kind of conservation, and that [illegible] be brought about only by large unit production [illegible] to the consumer of power.

[illegible]. Montana is only one of the States of the West that [illegible] operations. For instance, you take the Bingham [illegible]

[illegible] power.

[illegible]. You could not mine copper in that district unless [illegible] cost of power and low cost of everything else.

[illegible]. Senator, as highly advantageous as [illegible] seems to me that it is even more important [illegible]. You can put in the lowest-cost type [illegible] that otherwise involve installing a steam [illegible] where is no water, or a gasoline hoist at a place [illegible] expensive.

[illegible] reasons why I claim that I am just as favor- [illegible] development of the hydroelectric possibilities in [illegible] I went out there once a year and cast my vote.

[illegible] matter of valuation, I think that we must keep [illegible] or scheme of valuation that is provided for [illegible] taking over of this plant at the end of the [illegible] simply a valuation for the purpose of rate [illegible] Remember that valuation is what is going to [illegible] fixing of rates for the period after that. [illegible], that there are just the two parties to [illegible] must be considered. They are the [illegible] And it must be a fair valuation that will [illegible] who had invested, be fair to the [illegible] to the current user of the future.

The argument has been presented that the Ferris bill takes away the payment for appreciation in real estate without providing any offset for loss through depreciation of other property. Those arguments have been made. If you analyze what is suggested instead you will find that two speculative elements are to be introduced, the one to offset the other. It seems to me we should try rather to cut out every possible risk in the scheme of valuation and not to provide, for the reason there may be an uncertainty in one case, an additional uncertainty in another case to offset it. As it strikes me, any and all uncertainty, wherever it is, is going to express itself in the cost of capital, is bound to make for higher cost of capital, and in that way, for higher rates of operating. And the public will have to pay for it.

Now, I think that some changes might possibly be made in section 5. but I think they should be made along that line of making it more certain; not by introducing an uncertain factor but by removing any that may possibly exist there now. The unearned increment in the real estate, however, should not be charged up against the public, which I think has in fact earned it. I know that nothing like this is found in any laws that we have on the statute books, but this is simply a proposition of making a law that will be in accord with the trend of public opinion at the present time as that public opinion is beginning to be expressed in the decisions of rate-fixing commissions and as it is expressed by the Federal Interstate Commerce Commission, and repeated over and over in these decisions. It occurs to me that the new idea is that the public servant and the public-service corporation must work together to serve and protect the public.

Senator SMOOT. Before you leave this subject, I want to get your ideas as to whether there are any intangible elements of cost in the way of costs that should be taken into consideration at the time the property is valued by the Government. For instance, you well know that there is a great deal of money spent, and necessarily so, and rightfully so, in the establishment of any great enterprise, in the time that it takes and the needs for investigations, the surveys that are made, the reports that are written, and the counsel or attorneys' fees that are charged, and dozens of other items. Do you think that they ought to be included in the cost of the plant at the end of 50 years?

Mr. SMITH. In so far as those expenses, which some people call going value and others call overhead charges, etc.—in so far as those represent actual investment, provision should be made for their repayment, if, however, the investors have not already received such return. It should be a reimbursement proposition. We must first of all try to make the investment just as certain and definite and as profitable as possible; but I think that the general principle that is coming into vogue, the present tendency in all valuations, is to get just as close to the actual cost as is possible.

Senator SMOOT. I think I agree with you, Doctor, in that, but it is the items that enter into that valuation that I am inquiring about.

Mr. SMITH. I will mention those one by one.

Senator SMOOT. The items that I have named under section 5 of this bill would be classified as intangible.

Mr. SMITH. I think they should be included, but not more than once in any case.

Senator SMOOT. Oh certainly not.

was an uncertain proposition. But
and there has already been a 100 p
Senator SMOOT. They bet on the
Mr. SMITH. There is, however, a
present. And let me add that any
of the kind I have mentioned, woul
profit, and would not be taken ou
Senator SMOOT. Not in that cas
Mr. SMITH. And there are other
Senator SMOOT. I do not know
Mr. SMITH. But in connection
too much emphasis can not be pl
that is being rendered in power
price of power. I may be repea
made this morning, but it is on
in reporting to the Secretary of
power permit, namely, that by
simply going to make an incre
ore, but you are going to open up
could be mined and brought to
crease the available metallic reso
simply reducing the cost of ext
margin between cost and mark
itself in an ultimately larger to
there again we have the very
conservation can be brought
power with low prices to the co
Senator SMOOT. Montana is o
has just such propositions. F
district in Utah——
Mr. SMITH. Or the Tintic.
Senator SMOOT. You could
you had very low cost of powe
Mr. SMITH. More than that,
power is to a big mine, it seems
to a mine in the prospect stage
of efficient hoist, which might
plant at a point where there is
where transportation is expen
Those are some of the reason
ably inclined to large develop
the West as though I went on.
Now, to come to this matte
in mind that any valuation o
in connection with the takin
period, say, 50 years, is sim
making at that time. Reme
determine the basis for the
It seems to me, as I have sa
be considered. They both
investor and the consumer.
mean reimbursement to p
investor of the past and be

I said, is to try to get at

was called by Mr. Britton,
of the California Rail-
very points, as to what
should be given to the

theories, the mind of a practical
single question of the amount of

mmissioner Lane in the
considering the claim of
the entire present value
upon that first provision in

able and equitable rates are to be
ld be wise for the Government to
s at present value rather than
y will have multiplied in value

item of $150,000,000 of
is quoted as reaching the
for fixing rates. I quote
ssion on this subject:

indicate that we should accept
rton's estimate is made nor the
ximate value, nor the price
l investment alone, as the test of
haps the nearest approximation to
sacrifice made by the owners
any shortage of return that the
ers, taking the life history of the
entitled to a reasonable return
uld not be given upon waste
there is present the restriction

Secretary Lane.
and the Commissioner Lane
same man? He was then a
mission?
of the Interior.
n or line of thought that is
of the different rate-making

h are discussed in each one
sions, it seems to me that the
company—that is, by allow-
sums that had been actually
t to be ascertained they will
taken the opinion of the engi-
never, in this same Antioch
4, the commission refuses to
ere as a matter of fact the com-
enditures. In the case of one

· Pacific Gas & Electric Co. the overhead per-
allowed for the construction of the plant (the
and a half times what was actually spent for
: in that particular case having been employed.
commission refused to adopt the overhead per-
the company and took the actual expenditures.
And rightfully so.
·l I think that the California Commission rather
my answer to the question regarding intangibles,

·a good deal of discussion, and after reading a
·ons, we may not come much nearer having a clear
l before. I have read so many different definitions
·r instance, that I adopted the method of defining
it seems to me that going value can be expressed
: simply as the cost of getting the project to going.
·' civil engineers has suggested that for that term,
·ne thing to one body of men and other things to
be substituted the term "development expenses,"
would include the very items which Senator Smoot

·LING. The going value would include the cost of get-
· to going up to its present development and capacity.
it would include not only getting it finally going,
·arket for its output.
·OT. I do not understand the definition of going value
·u do. My idea of the going value, as I have always
in the past, is that it is the fair value of the property
·at the valuation is made or at the present time.
But it has included an intangible element, including
· some cases. They have also put some time into it, as
it into the valuation of water rights and rights of way,
·· between the cost of hydroelectric power and the same
rated in some other way. Various commissions have
·t aside, especially the California Commission. The
· is true of franchise valuc. Some commissions have
nd some have not. Only last week the New Jersey court
·e utilities commission and allowed a valuation to be
·.e franchise for rate-making purposes as they specified.
SMOOT. Was that based on the cost to them of the fran-

H. No, it is a value in addition to the cost. The utilities
·n would allow the cost of the franchise.
·stand that the mayors of New Jersey, this being a gas
·ne in which many municipalities are interested, are trying
· to the full court, the decision having been rendered by
out of 16.
·r NORRIS. They simply added an arbitrary per cent, did
·
SMITH. I do not remember.
·r NORRIS. It was not based on the actual cost, for that had
·owed before.
SMITH. It was its value as an investment, I suppose.
·tor NORRIS. Yes.

Mr. SMITH. And I think the tendency, as I said, the actual investment.

In this decision to which my attention was ca affecting his company, Commissioner Thelen, of road Commission, discusses some of those very should be the basis and what consideration sh going concern value, etc. He says:

> After a consideration of these and other fine-spun theori man instinctively turns for first guidance to the simple money which has been honestly and wisely invested.

In that connection he quotes then Comm Western Advance case, where they were co the Burlington Railroad for the return on th of the property. We are touching now upon section 5.

Mr. Lane, in that decision, said:

> In the face of such an economic philosophy, if stable maintained, the suggestion has been made that it would protect its people by taking to itself these properties await the day, perhaps 30 or 50 years hence, when they ten or twenty fold.

The item he was considering was an unearned increment, etc. Then Mr. Lane following conclusion as the proper basis f this because I think it is the best expressi

> The trend of the highest judicial opinion would neither the cost of production upon which the Burli capitalization which the Santa Fe accepts as appr stocks and bonds in the market, nor yet the origin present value for the purposes of rate regulation. Pr the fair standard is that of bona fide investment—t the property—considering as a part of the investme may be in the early years of the enterprise. Upon road through a number of years, its promoters ar This, however, manifestly is limited; for a return ness, mismanagement, or poor judgment, and alw that no more than a reasonable rate shall be char

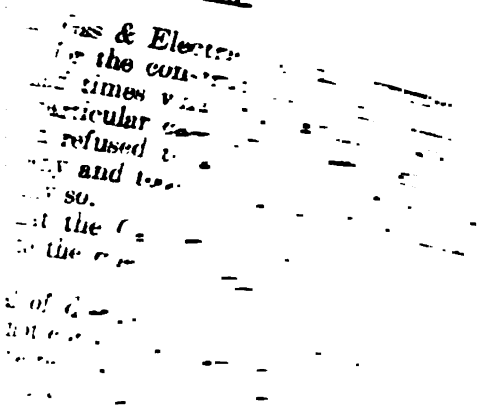
I suppose that is also the opinion of S

Senator ROBINSON. Secretary Lane who rendered that opinion are one and t member of the Interstate Commerce Co

Mr. SMITH. Yes; and now Secretary

And that also seems to be the opin rather common now in the decision boards and commissions

Now, regarding these intangibles, w of these opinions of the various comm commissions are willing to reimburse ing certain items in the valuation— t expended, and where such sums are in some cases, and have in some case neers making the appraisement. decision, which was of date July 6. take certain overhead percentages pany has on its books the actual



ir arguments
making.
eir books.
en tried in the
a claim, similar
Mr. Clark, who
d its methods, I
hat is claimed by
ave been made by
ed off, because we

garding the centrali-
atements that are in-
between pages 652 and
for which I admit and
uestion by Representa-
at data we had regarding
had not any full record,
re of work, although we
hat we have the informa-
was then brought together.
tee accused the Geological
ly from popular magazines,
hich I happened to know at
l, I assure you, but Moody's
orates were used, and it is so
t, as I have been shown by
ommittee, does contain certain
the information was compiled
rprised to find that there are
surprised that more errors were
gnificant thing, however, is that
of interests; that is, this man or
shown to be a director in a con-
Now, what is to be inferred from
ctors is for others than myself to
se facts as significant. I have been
present that these same facts are
m as pertinent, and these gentlemen
rtinent, but the facts are, I believe,
facts were set forth for the benefit of
the Capitol and at their request, and I
d now as they were then, and no better.
simply to state what I think is the future
tion. The bond seller is very much of
on you. I think, however, that some of
the financial interests have not been as
nd what it would do for the West as I have
claim the privilege of giving what may be
w of what can be done under this bill when
may not be a perfect bill, but I do support
it. I think that such regulation even as we
about greater security to investors, at some

Mr. SMITH. But when you fix the return
seems to me that thereby you are going to
for other purposes.

There has been a great deal said on one
obsolescence, and whether that should be i
Of course, it comes right down to the quest
the old machinery and put in new. That
new will do the work better and cheaper,
of that out of their returns if there is tim
is done in the last year, or within the l
some allowance made for it, because it ca
in that time. But it seems to me that
service corporations as well as the publi
pay for that largely, if not wholly, out o

I was interested in the statement m
Stone & Webster's Public Service Journ
a large number of plants which had l
their equipments and betterments in the
in savings of from 15 per cent to 55 per
only in a few extreme cases had they f
ments in six months.

Senator SMOOT. That is the case in
business, in the woolen business, and
business. Every up-to-date manufact
machinery or he would go out of busi

Mr. SMITH. As to what part of the
machinery should go into the ultimate
sented by capital, I have found what
expression of my own idea had bee
mortgage of the Utah Power & Light
section 4, in which it says:

> No bonds shall be issued under this inde
> for the company to keep or maintain the pr
> and business-like order and condition, or m
> out property provided, however, that whe
> is replaced by property costing more than
> would cost if new at the time of replaceme
> property acquired to replace the old, in
> excess only, shall be deemed permanent
> which bonds may be certified and delivere

And so on.

That, I think, is more or less the
ing and holding companies, and I
should be expressed in any provis

Senator SMOOT. That is the gen
facturers who replace old machine

Mr. SMITH. And yet corporatio
of these State commissions and
replacement put to the capital a
the New York Commission has
five times and you would then
six plants, but have only one p
investment.

Senator SMOOT. Doctor, did
that?

fits. I think
increase the
security should

it seems to me.
ter of inventi n
of competition.
ence of competi-
article only the
will be to substi-
rate, and in that
in the Gas Record
n illustration a c
He showed how the
cents, which would
er cent, and, at the
on that investment
r cent up to 8.90 per
a larger use, and the

legislation simply by
perior to the 1901 law.
d in the interest of the
so bring about a larger
stern States, and I do
e of these powers to the
Hydroelectric develop-
will make for a greater

ator Smoot of Mr. E. C.
permits in Ontario which
of January 17, 1898:

| Lessee. | H
P
A
o |
|---|---|
| Electric Co. | |
| Co. | |
| Power Co. | |
| Co. | |
| Power Co. | |
| bridge | |
| Falls | |
| Power Co. | |
| | |

INGWAY, OF KENTUCKY, AT DISTRICT OF COLUMBIA.

and whom you represent to the

way, of Kentucky; a resident of

I do not appear on behalf of any
e general good.
nating purpose in this bill should be
lowest price possible, and to accom-
essary to prevent the holding out of

public lands have passed into private
s held out of use for speculative pur-
nd the output sold at the best prices
were often extortionate, being regulated
e prices for power obtained from more

this bill is to correct this.
quately provides against holding the sites
provision in the bill to require that the
e lowest price possible. It may be ques-
ority vested in the Secretary of the Interior

occurred before this committee which may
d. I shall endeavor to show how this bill
to secure prompt and adequate development,
ke the needed advances, and supply energy
ible to all desiring to use it.
complish by regulation what can be more cer-
er done by natural law? The power sites are
the people and they are entitled to the develop-
such conditions as will yield to them the greatest
d nothing should be allowed to prevent this.
the plants thereon and furnish the output at the
e render a great public service, and should be
sonable inducement to do so, and should not be
way. No ulterior consideration should be allowed
To attempt to fix now in either lease or contract a
r 50 years to come would be unwise, because con-
conditions would inevitably change the cost of pro-
g in great benefit or injury to the producer or con-
ance, if the price of bituminous coal were to drop to
ded, as is quite likely to occur within 50 years.
er is or can be competent to determine what should
because he can not get access to the elements involved.
s are those engaged in the business, and if the question
they will determine it right. But only on a competi-
l they furnish it.
charged the consumer is fixed by comparison with the
l under some more expensive mode of production, then

sacrifice, it is true, of the chance to win very large profits. I think the financial men will agree with me that when you increase the security you take away the chance for big profits, but security should be first.

Now, the consumer must also sacrifice something, it seems to me. Somebody has asserted that competition was the mother of invention and that improvements came only through the force of competition. What substitute is there for that stimulating influence of competition? One suggestion has been made. I read an article only the other day, along that line, that the future method will be to substitute for a fixed rate return in rate fixing a variable rate, and in that way put a premium upon efficiency. This author in the Gas Record took up a system of profit sharing and used as an illustration a gas works operating through a period of 10 years. He showed how the rates for gas could be reduced from $1 to 85 cents, which would result in a total saving to the consumers of 10 per cent, and, at the same time, would allow an increase in the earning on that investment from the fixed rate at the beginning of 6.68 per cent up to 8.90 per cent. This is profit sharing resulting through larger use, and the larger use coming through lowering of price.

I think that I can express my interest in this legislation simply by saying that I want to see a 1915 law that is superior to the 1901 law, because it is one that can be better administered in the interest of the investor and the operator and the consumer, and so bring about a larger development of these water powers in the Western States, and I do not believe that we can overestimate the value of these powers to the communities near which they are situated. Hydroelectric development is, in my opinion, the one element that will make for a greater West.

(NOTE.—Referring to the inquiry of Senator Smoot of Mr. E. C. Finney, page 35, the following is a list of permits in Ontario which have been issued under the terms of the act of January 17, 1898:)

Date of lease.	Location.	Lessee.	H. P.
Sept. 14, 1901	Mattawa River	Black Donald Graphite Co.	
Sept. 21, 1901	Wanapitei River	Wanapitei Power Co.	
Feb. 15, 1904	Montreal River	Otomi Power Co.	
May 16, 1901	Montreal River	Cobalt Hydraulic Power Co.	
Dec. 19, 1905	Lac Seul and Winnipeg River	Corporation of Kenora	
Apr. 27, 1908	Sturgeon River	Sturgeon River Power Co.	
July 20, 1907	Muskoka River	Corporation of Bracebridge	
June 1, 1907	Montreal River	Cobalt Power Co.	
May 6, 1907	Severn River	Corporation of Orillia	
Dec. 18, 1907	Nipissing River	Mond Nickel Co.	
Sept. 7, 1909	Severn River	Simpson Railway & Power Co.	
Mar. 21, 1910	Mattagami River	Young & Bilsky	
	Total to 1911		

STATEMENT OF MR. C. B. HEMINGWAY, OF KENTUCKY, AT PRESENT RESIDING IN THE DISTRICT OF COLUMBIA.

The CHAIRMAN. Give your name and whom you represent to the stenographer.

Mr. HEMINGWAY. C. B. Hemingway, of Kentucky; a resident of Washington at present.

Mr. Chairman and gentlemen, I do not appear on behalf of any special interest. My concern is the general good.

It seems to me that the dominating purpose in this bill should be to provide electric power at the lowest price possible, and to accomplish this it is, incidentally, necessary to prevent the holding out of use of power sites.

Heretofore power sites on public lands have passed into private ownership, to be in some cases held out of use for speculative purposes, or to be improved and the output sold at the best prices obtainable; and such prices were often extortionate, being regulated only by competition with the prices for power obtained from more expensive sources.

I presume the purpose of this bill is to correct this.

The bill, I believe, adequately provides against holding the sites out of use, but there is no provision in the bill to require that the output shall be sold at the lowest price possible. It may be questionable whether the authority vested in the Secretary of the Interior will secure it.

Many differences have occurred before this committee which may be reconciled or adjusted. I shall endeavor to show how this bill may be amended so as to secure prompt and adequate development, induce capitalists to make the needed advances, and supply energy at the lowest price possible to all desiring to use it.

Why undertake to accomplish by regulation what can be more certainly and much better done by natural law? The power sites are now the property of the people and they are entitled to the development of them under such conditions as will yield to them the greatest possible benefit, and nothing should be allowed to prevent this. Those who develop the plants thereon and furnish the output at the lowest possible price render a great public service, and should be accorded every reasonable inducement to do so, and should not be penalized in any way. No ulterior consideration should be allowed to obscure this. To attempt to fix now in either lease or contract a price for power for 50 years to come would be unwise, because constantly changing conditions would inevitably change the cost of production, resulting in great benefit or injury to the producer or consumer. For instance, if the price of bituminous coal were to drop to half or be doubled, as is quite likely to occur within 50 years.

No public officer is or can be competent to determine what should be a fair price, because he can not get access to the elements involved. The best judges are those engaged in the business, and if the question is left to them they will determine it right. But only on a competitive basis will they furnish it.

If the price charged the consumer is fixed by comparison with the price charged under some more expensive mode of production, then

the lowest possible price will not be made, and the charge for the use of the site or on the output will not be added to the price, but will be paid by the producer, because he could not increase the price.

But if the price charged the consumer is fixed by free competition, then a charge for the use of the site or on the output will be added to the price, and will be paid by the consumer in enhanced price.

If no rent is charged for the site and no charge is made on the output, and the conditions are such that free competition controls, then the lowest possible price will be charged the consumer.

If the site is leased free of rent and no charge is made on output, the lease to be perpetual, except that it shall be subject to forfeiture on condition that the price charged the consumer is greater than the lowest possible price, then conditions will conform to the stated requirements of the producers and serve the best interests of the consumers.

When it is provided that in the event of forfeiture of lease the producer shall be reimbursed for his expenditures in erecting the plant, etc., then he has no just ground for claiming a right to continue, and the capitalist is adequately assured that his advances are safe, and under such conditions he will not hesitate to advance funds for development.

How can the lowest possible price for output be determined? Simply by providing that a qualified party who will undertake to supply output at a materially lower price, and shall give a sufficient bond to carry out the undertaking, shall have a right to take over the plant as provided in sections 5 and 6. The effect of this provision will be to induce the producer to put and keep his price down to the lowest at which he will feel that his tenure is safe; and only when he fails to do so will he be in any danger of being ousted, because large capital will not be found to take over the plant unless it is certain that at the lower price it will yield an adequate return. But it is quite certain that if it will yield an adequate return he will undertake it.

One thing to be avoided, as far as possible, in this bill is the giving of power to a lessee to continue for a long period the perpetration of a wrong under a mere color of right pending the action of courts in long-drawn-out proceedings. And another thing to be avoided is limiting unnecessarily the functions of public officers by referring to courts questions which may very properly be decided by such officers.

These power plants are to be erected on public lands for the benefit of the people, and the terms to producer and consumer should be uniform throughout the United States, and not subject to such variations as would exist if turned over to the respective States.

If this law provides the best possible conditions for all, there is no reason why they should be modified under any pretense.

A water-power lease should be granted only to, and it should be mandatory that it be granted to, the party who guarantees to promptly erect the necessary plant and furnish the output at the lowest possible price. And the tenure of the lease should be determined only by those two considerations; and the lease should be terminated whenever another guarantees to furnish the output at a materially lower price and to properly reimburse the lessee for the value of the plant. And the termination of the lease should be a function of a public officer, subject of course to judicial review there-

after when the lessee considers that he has just ground therefor, as no lessee should be permitted to continue to charge a higher price than another would charge, and protract his tenure upon a mere color of right.

I have prepared a bill containing proposed amendments to the bill under consideration, which I would like to submit. In this bill I propose that the period be changed to an indefinite period, and that in granting leases we give a preference to the applicant who agrees to sell the output of power at the lowest price, where such power is available for general use.

In regard to limiting the amount that shall go to any one consumer, I have proposed that it shall not be in excess of 50 per cent of the total output when such delivery shall infringe upon the equal rights of small consumers, who shall have preference; nor shall any contract be entered into unless the nature of the use of the power be such as to require an indeterminable period of service; and such contracts shall be subject to variations of price as herein provided.

I have modified section 5 slightly. Such reasonable value to be determined by mutual agreement between the Secretary of the Interior and the lessee and the applicant for the lease, if such there be, which agreement must be consistent with the data shown in the reports herein provided, and may be subject to review by the United States district court.

In section 6 I propose that where a plant furnishes power available for general use, if an applicant agrees to furnish such power at a reduction in price of not less than 10 per cent, and furnishes a good and sufficient bond to insure the taking over of the properties as provided in section 5 of this act, the existing lease shall terminate and a lease shall be granted to said applicant. The price for power shall be subject to revision at the option of the lessee, except that it shall not be increased within seven years after the lease is granted.

There is a slight amendment in section 7.

In section 8 I propose that for the occupancy and use of lands and other property of the United States permitted under this act, the Secretary of the Interior shall collect no charges or rentals.

In section 9. That in case of the development, generation, transmission, or use of power or energy under a lease given under this act, the charges to consumers for services shall be determined by free competition as heretofore provided, and the control of service and of stock and bond issues shall be vested in the Secretary of the Interior or committed to such body as may be authorized by Federal statute.

In section 11 I include the information as to securing rights of way which, inadvertently, I think, has been left out, and provide that these reports shall be accessible to the public for inspection.

Section 12. That any such lease may be forfeited and canceled by the Secretary of the Interior, subject to review by a court of competent jurisdiction, whenever the lessee, etc.

Those are all of the amendments to the bill that I propose.

As to the economic question involved: Suppose the effect of this bill is to secure the supply of all power needed by all, and at the lowest price possible, who would get the ultimate benefit? The capitalist wants the current rate of interest plus adequate insurance on the risk. While the effect would be to diminish the risk, it would not increase the rate of interest, and therefore the capitalist class would not get it.

The laborer (and by that I mean all who with brawn or brain produce desired things, such as produce, books, laws, and things like the while temporarily benefited, ultimately would not be, because the rate of wages would not rise. Then of course the landowners would get it, because the effect of cheaper power would be to increase the rental value and price of land.

The CHAIRMAN. We are very much obliged to you, Mr. Hemingway.

(The bill, with amendments proposed by Mr. Hemingway, is as follows:)

AMENDMENTS PROPOSED BY C. B. HEMINGWAY.

[H. R. 16673, Sixty-third Congress, second session.]

AN ACT To provide for the development of water power and the use of public lands in relation thereto, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior be, and hereby is authorized and empowered, under general regulations to be fixed by him, and under such terms and conditions as he may prescribe, not inconsistent with the terms of this act, to lease to citizens of the United States, or to any association of such persons or to any corporation organized under the laws of the United States or any State or Territory thereof, any part of the public lands of the United States (including Alaska) reserved or unreserved, including lands in national forests, the Grand Canyon, Mount Olympus national monuments, and other reservations, not including national parks or military reservations, for ~~a period not longer than fifty years~~ *an indeterminate period* for the purpose of constructing, maintaining, and operating dams, water conduits, reservoirs, power houses, transmission lines, and other works necessary or convenient to the development, generation, transmission, and utilization of hydroelectric power, which leases shall be irrevocable except as herein provided, but which may be declared null and void upon breach of any of their terms: *Provided,* That such leases shall be given within or through any of said national forests or other reservations only upon a finding by the chief officer of the department under whose supervision such forest, national monument, or reservation falls that the lease will not injure, destroy, or be inconsistent with the purpose for which such forest, national monument, or reservation was created or acquired: *Provided further,* That in the granting of leases under this act the Secretary of the Interior ~~may, in his discretion~~ *shall* give preference to *the applicant who agrees to sell the output of power at the lowest price, where such power is available for general use, or to* applications for lease for the development of electrical power by States, counties, or municipalities, or for municipal uses and purposes: *Provided further,* That for the purpose of enabling applicants for a lease to secure the data required in connection therewith, the Secretary of the Interior may, under general regulations to be issued by him, grant preliminary permits authorizing the occupation of lands valuable for water-power development for a period not exceeding one year in any case, which time may, however, upon application, be extended by the Secretary of the Interior if the completion of the application for lease has been prevented by unusual weather conditions or by some special or peculiar cause beyond the control of the permittee.

SEC. 2. That each lease made in pursuance of this act shall provide for the diligent, orderly, and reasonable development and continuous operation of the water power, subject to market conditions, and shall provide that the lessee shall at no time contract for the delivery to any one consumer of electrical energy in excess of fifty per centum of the total output *when such delivery shall infringe upon the equal rights of small consumers, who shall have preference; nor shall any contract be entered into unless the nature of the use of the power be such as to require an indeterminable period of service; and such contracts shall be subject to variations of price as herein provided.*

SEC. 3. That in case of the development, generation, transmission, and use of power or energy under such a lease in a Territory, or in two or more States, the regulation and control of service and of charges for service to consumers and of the issuance of stock and bonds by the lessee is hereby conferred upon the Secretary of the Interior or committed to such body as may be provided by Federal statute: *Provided,* That the physical combination of plants or lines for the generation, distribution, and use of power or energy under this act or under leases given hereunder may be permitted in the discretion of the Secretary of the Interior, but combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy

to restrain trade with foreign nations or between two or more States or within any one State, or to fix, maintain, or increase prices for electrical energy or service are hereby forbidden.

SEC. 4. That except upon the written consent of the Secretary of the Interior no sale or delivery of power shall be made to a distributing company, except in case of an emergency and then only for a period not exceeding thirty days, nor shall any lease issued under this act be assignable or transferable without such written consent: *Provided, however*, That no lessee under this act shall create any lien upon any power project developed under a permit issued under this act by mortgage or trust deed, except approved by the Secretary of the Interior and for the bona fide purpose of financing the business of the lessee. Any successor or assign of such property or project, whether by voluntary transfer, judicial sale, foreclosure sale, or otherwise, shall be subject to all the conditions of the approval under which such rights are held, and also subject to all the provisions and conditions of this act to the same extent as though such successor or assign were the original lessee hereunder.

SEC. 5. That ~~upon not less than three years' notice, which may be issued at any time after three years immediately prior to the expiration of any lease under this act,~~ the United States shall have the right to take over the properties ~~which are dependent in whole or in part, for their usefulness, on the continuance of the lease, herein provided for, and~~ which may have been acquired by any lessee ~~acting~~ under the provisions of this act, upon condition that it shall pay, before taking possession, first, the actual costs of *securing* rights of way, water rights, lands, and interests therein purchased and used by the lessee in the generation and distribution of electrical energy under the lease, and, second, the reasonable value of all other property taken over, including structures and fixtures acquired, erected, or placed upon the lands and included in the generation or distribution plant, ~~and which are dependent as hereinabove set forth~~; such reasonable value to be determined by mutual agreement between the Secretary of the Interior and the lessee, ~~and, in case they can not agree, by proceedings instituted in~~ *and the applicant for the lease, if such there be, which agreement must be consistent with the data shown in the reports herein provided, and may be subject to revision by* the United States district court ~~for that purpose~~: *Provided*, That such reasonable value shall not include or be affected by the value of the franchise of good will or profits to be earned on pending contracts or any other intangible element.

SEC. 6. ~~That in the event the United States does not exercise its right to take over, maintain, and operate the properties as provided in section five hereof, or does not renew the lease to the original lessee upon such terms and conditions and for such periods as may be authorized under the then existing applicable laws, the Secretary of the Interior is authorized, upon the expiration of any lease under this act, to lease the properties of the original lessee to a new lessee upon such terms, under such conditions, and for such periods as applicable laws may then authorize, and upon the further condition that the new lessee shall pay for the properties as provided in section five of this act~~ *where a plant furnishes power available for general use, if an applicant agrees to furnish such power at a reduction in price of not less than ten per centum, and furnishes a good and sufficient bond to insure the taking over of the properties as provided in section five of this act, the existing lease shall terminate and a lease shall be granted to said applicant. The price for power shall be subject to revision at the option of the lessee, except that it shall not be increased within seven years after the lease is granted.*

SEC. 7. That where, in the judgment of the Secretary of the Interior, the public interest requires or justifies the execution by any lessee of contracts for the sale and delivery of electrical energy for periods extending beyond the life of the lease, ~~but for not more than twenty years thereafter,~~ such contracts *except as to price* may be entered into upon the approval of the said Secretary, and thereafter, in the event of the exercise by the United States *or a new lessee* of the option to take over the plant in the manner provided in sections five or six hereof, the United States or its new lessee shall assume and fulfill all such contracts entered into by the first lessee.

SEC. 8. That for the occupancy and use of lands and other property of the United States permitted under this act the Secretary of the Interior ~~is authorized to specify in the lease and to collect charges or rentals for all power developed and sold or used by the lessee for any purpose other than the operation of the plant, and the proceeds shall be paid into, reserved, and appropriated as a part of the reclamation fund created by the act of Congress approved June seventeenth, nineteen hundred and two, known as the reclamation act, and after use thereof in the construction of reclamation works and upon return to the reclamation fund of any such moneys in the manner provided by the reclamation act and acts amendatory thereof and supplemental thereto, fifty per centum of the amounts so utilized in and returned to the reclamation~~

~~fund shall be paid by the Secretary of the Treasury after the expiration of each fiscal year to the State within the boundaries of which the hydroelectric power or energy is generated and developed, said moneys to be used by such State for the support of public schools or other educational institutions or for the construction of public improvements, or both, as the legislature of the State may direct: *Provided*, That leases for the development of power by municipal corporations solely for municipal use shall be issued without rental charge, and that leases for development of power not in excess of twenty-five horsepower may be issued to individuals or associations for domestic, mining, or irrigation use without such charge~~ *shall collect no charges or rentals.*

SEC. 9. That in case of the development, generation, transmission, or use of power or energy under a lease given under this act ~~in a State which has not provided a commission or other authority having power to regulate rates and service of electrical energy and the issuance of stock and bonds by public-utility corporations engaged in power development, transmission, and distribution,~~ *the charges to consumers for services shall be determined by free competition as heretofore provided, and* the control of service ~~and of charges for service to consumers~~ and of stock and bond issues shall be vested in the Secretary of the Interior or committed to such body as may be authorized by Federal statute ~~until such time as the State shall provide a commission or other authority for such regulation and control.~~

SEC. 10. That where the Secretary of the Interior shall determine that the value of any lands, heretofore or hereafter reserved as water-power sites or for purposes in connection with water-power development or electrical transmission, will not be materially injured for such purposes by either location, entry, or disposal, the same may be allowed under applicable land laws upon the express condition that all such locations, entries, or other methods of disposal shall be subject to the sole right of the United States and its authorized lessees to enter upon, occupy, and use any part or all of such lands reasonably necessary for the accomplishment of all purposes connected with the development, generation, transmission, or utilization of power or energy, and all rights acquired in such lands shall be subject to a reservation of such sole right to the United States and its lessees, which reservation shall be expressed in the patent or other evidence of title: *Provided*, That locations, entries, selections, or filings heretofore allowed for lands reserved as water-power sites or in connection with water-power development or electrical transmission may proceed to approval or patent under and subject to the limitations and conditions in this section contained, but nothing herein shall be construed to deny or abridge rights now granted by law to those seeking to use the public lands for purposes of irrigation or mining alone.

SEC. 11. That the Secretary of the Interior is hereby authorized to examine books and accounts of lessees, and to require them to submit statements, representations or reports, including information as to cost of *securing rights of way*, water rights, land easements, and other property acquired, production, use, distribution, and sale of energy, all of which statements, representations, or reports so required shall be upon oath, unless otherwise specified, and in such form and upon such blanks as the Secretary of the Interior may require, and *shall be accessible to the public for inspection*, and any person making any false statement, representation, or report under oath shall be subject to punishment as for perjury.

SEC. 12. That any such lease may be forfeited and canceled ~~by appropriate proceedings, in a court of competent jurisdiction,~~ *by the Secretary of the Interior, subject to review by a court of competent jurisdiction*, whenever the lessee, after reasonable notice, in writing, as prescribed in the lease, shall fail to comply with the terms of this act or with such conditions not inconsistent herewith as may be specifically recited in the lease.

SEC. 13. That the Secretary of the Interior is hereby authorized to perform any and all acts and to make such rules and regulations as may be necessary and proper for the purpose of carrying the provisions of this act into full force and effect.

SEC. 14. That nothing in this act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State relating to the control, appropriation, use, or distribution of water.

SEC. 15. That all acts or parts of acts providing for the use of the lands of the United States for any of the purposes to which this act is applicable are hereby repealed to the extent only of any conflict with this act: *Provided, however*, That the provisions of the act of February fifteenth, nineteen hundred and one (Thirty-first Statutes at Large, page seven hundred and ninety), shall continue in full force and effect as to lands within the Yosemite, Sequoia, and General Grant National Parks in the State of California. *And provided further*, That the provisions of this act shall not be construed as revoking or affecting any permits or valid, existing rights of way heretofore given or granted pursuant to law, but at the option of the permittee

any permit hertofore given for the development, generation, transmission, or utilization of hydroelectric power may be surrendered and the permittee given a lease for the same premises under the provisions of this act.

SEC. 16. That this act shall not apply to navigation dams or structures under the jurisdiction of the Secretary of War or Chief of Engineers, or to lands purchased or acquired by condemnation by the United States, or withdrawn by the President under the act approved June twenty-fifth, nineteen hundred and ten, entitled "An act to authorize the President of the United States to make withdrawals of public lands in certain cases," where such lands are purchased, acquired by condemnation, or withdrawn by the President for the sole purpose of promoting navigation.

Passed the House of Representatives August 24, 1914.

Attest: SOUTH TRIMBLE,
Clerk.

STATEMENT OF MR. SIDNEY Z. MITCHELL, PRESIDENT OF THE ELECTRIC BOND & SHARE CO., OF NEW YORK, N. Y.

Mr. MITCHELL. Mr. Chairman and Senators, late in December, 1885, I completed and put in operation in Seattle, Wash., the first central station incandescent electric-light plant built west of the Rocky Mountains. For about 20 years I lived in the Pacific Northwestern States and was engaged, first in building and operating, and later in financing, electric light and power plants throughout the Northwestern States and in British Columbia. My first hydroelectric plant was built and started in Spokane, Wash., in May, 1886. I have ever since taken a special interest in, and have given particular study to, power economics and finance. I am now the president of the Electric Bond & Share Co., and for the past nine years have been located in New York, engaged in the business of buying and selling securities of electrical utility companies; specializing in the securities of both hydroelectric and steam power plants.

I spend a great deal of time in the intermountain and Pacific coast country, and have, therefore, been in continuous actual touch with western conditions for about 29 years. On account of a leaning toward western developments my company has in the past dealt, and is still dealing, largely in the securities of western enterprises.

As a part of my regular work it has been necessary to analyze and carefully study on the ground, and from the practical standpoint, every angle and phase of the public utility business in the arid States. I refer to power enterprises as public utilities because all the power systems of any consequence in the West are public utilities, and all those of consequence in the East are likewise public utilities, and in my opinion the great growth of the power business will not be for private uses, but for strictly public uses, under the supervision of public utility commissions.

I take it that the object of this bill is to remove the handicap to power development which now exists wherever any Government land is involved, and to secure for the people the greatest commercially practicable development of water powers in the least possible time, and on a basis which will permanently secure for the people a maximum of service at a minimum of cost. I am heartily in accord with this theory, and I will, therefore, start with it as my text.

There seems to be a notion that all water power is cheaper than steam power, and that water powers are exceedingly scarce, and, accordingly, are in every case of immense value and that investors are eager to get into the water-power business. All of these notions

are fallacious. In some cases water power is much cheaper than steam. In many cases the reverse is true. Each case must be analyzed and considered in the light of surrounding circumstances and hardly any two cases are alike. Contrary to the general notion of the people who are not familiar with the business, water powers are, as a rule, large and numerous in the Western States, yet I know from experience that persuading investors to put their money into them is far from being easy.

Now, Senators, I have some remarks which I put in writing here in reference to the strictly financial part of this proposition for fear that I might get cut short on time; but, with your permission, I will skip that for a moment and take up other things which seem to me, after listening to the statements here, were not left in a shape to be readily understandable, and perhaps I might be of service by clearing up a few points of that kind. Then I will come back to the financial side of the question.

Some of these subjects may not be in sequence, because I merely jotted them down as they occurred to me. In the first place, I would like to make a few remarks apropos of some statements by Dr. Smith. If a bill can be drawn that will bring about the things that Dr. Smith says he stands for—and when he says he "stands for them," I know that he does—to wit, the largest possible development at the lowest possible cost to the consumer and in the least possible time, then I think that Dr. Smith and the bankers and investors, and, in fact, the entire people of the West, are in exact accord as to the desirability of securing just those things. I think the only difference—and they are all honest differences—are as to how we can best proceed to get those desired results.

Dr. Smith says transfers of the rights to go on Government land should be supervised. So far as concerns the right to transfer before money has been spent in a material amount, before development has been made in good faith, I am in entire accord with him, because no one knows better than I the numerous cases in the West where actual development is handicapped and made more expensive by people who see an opportunity to get in the way of actual development and hold it up. Holdups have existed from the beginning as to railroad rights of way and franchises and other essentials. I think it is entirely right that the Secretary should be able to keep such people off by revocation, thus removing obstructionists who do not go ahead and make actual development within some reasonable time, which should be specified in the permit or lease.

After the investment has been actually made we are dealing with property, and one of the very important attributes of property is the right to sell it. And I can tell you it will be a burden, which I do not think can accomplish any good, and which I know will do great harm to financing, if there is the slightest impediment to the transferability and salability of any property by any public utility concern beyond what is already put on them by the States themselves. In other words, it seems to me that it should not be a matter of governmental concern as to who operates the property or who the stockholders may be, or who the president and directors may be, so long as the company does its duty as set forth in the law and satisfies and pleases the public which is served. Obstructions to the ready sale and purchase of securi-

ties always increase the cost of money for initial development and subsequent extensions, therefore transferability ought to be facilitated.

The consumers do not care who owns the stock; neither do they care who the president of a power company is. They simply want good service, courteous treatment, plenty of development, and low rates.

Now, there has also been something said here about obsolescence. I want to say that this section 5, in my opinion, will be the most important and dangerous clause affecting this whole matter of water power development if it is passed as now written. I will not go into the discussion of the intangible section as written in the bill, because it has been amply covered by others, and I do not want to take your time on the question of obsolescence except to comment on the statement of Dr. Smith with respect to taking care of obsolescence in four or five years through amortization charges to the consumers. There may be a great many things you could take care of in that time, and perhaps in less time. On the other hand, I can very well conceive of situations where it would be a physical and absolute impossibility to collect from the consumers any rate which would take care of it in 10 years, or possibly in 15 or even 20 years. After an experience along practical lines in this work for many years in the West, I think I speak advisedly when I say that the people of the West do not like anything that is going to raise their rates. They do not want them disturbed at all unless they are disturbed downward. In this particular I do not think they are different from the eastern people who patronize railroads and electric light and power companies and other public utilities.

The way to amortize obsolescence or to amortize anything else is not by raising rates. I am absolutely and fixedly opposed to raising rates anywhere on anybody. I do not want to live in a community or to operate a public utility in a community if I have to earn my living by raising rates. I want to tell you that that kind of business is neither pleasant nor comfortable. That is not the thing we think about. We think about how to amortize something or how to increase profits in an entirely different way—never by raising the rates. It is always along the line, first, of getting cheaper money, and, second, of cutting down our operating expenses, and, third, of getting more volume. This stabilizes the business and makes your securities marketable, thus giving you cheaper money again in almost direct proportion to your volume and diversity of use and again reduces the cost of money in almost inverse ratio. This again gives you cheaper operation in direct proportion to the volume and diversity of your business, which again means cheaper money and lower consumer's rates, etc.

Now, Senators, that is the way, and the only way, anybody will ever get along in any community in the matter of taking care of obsolescence, of amortizing anything, or doing anything else. It is absolutely inconceivable to think of doing business in a community and getting anywhere by raising rates. Do not pass any legislation that will force it.

As shedding light on this question of volume, while I am on the subject, I may be able to say some things that will interest you, because if there is any one thing to which I have given very great attention in the last 15 or 20 years it is certainly the question of

how to reduce the price of money and how to reduce the cost of service, and the only way, as I said before, is to get the volume and diversification and the safety and stability which follow.

Now, then, how can you get the volume? The way to get volume is not to sit down and wait for business to come to your office, to put its foot in the door and force you to serve it, but to go out with a search warrant and look for it. Do not stay in the towns to look for it, but go out in the valleys for it and climb over the mountains for it. If you can not get it in your own State, go into another State—go wherever you can find it, but get it.

And then, by reason of getting more volume, you will find that you get stability. You may have a company that is running one mine. That mine gets into trouble and you are down and out. You may have a company that runs one irrigation project, pumping water; it happens to be a wet season. They pay on the meter basis and, as was the case last year in one or two districts which we serve, you get practically nothing for that. I have not the exact figures in front of me, but I have not the slightest idea that the company I am connected with in Utah, for instance, got as much as $12 per horsepower per year for some pumping service last summer because the community it served was paying on a meter basis. The wet season was their good fortune and our misfortune as to that particular customer, but I will say to you it was not our misfortune generally, because it helped the dry farmers, and that helped the community and we are not complaining about it. But for us to get the full benefits of rains to the dry farmers we have got to wait for the purely incidental and indirect effects to reach our properties, and this takes time. When the men selling securities in the East look up the seasonal showing of that particular project and see the business going to pieces, they say: "What is the matter with that project out there?" And it is the same thing if a very large mine shuts down. We are having that trouble to-day, and it is costing us over $20,000 a month on account of the war in Europe. One of the copper mines has shut down altogether and the other large one, the Utah Copper Co., is running half capacity and our power is wasting—we are short on market.

Now, how could we pay our interest, how could we pay our dividends, how could we pay for extensions, if we had only one line of business in one community that depends on one industry, if that industry were shut down? Our credit would be affected instantly. But, instead of that, our system covers 1,400 miles of high-tension lines. It is in three States. Sometimes we have a wet summer in one State and a dry summer in another State, so that our irrigation revenues for pumping water average up fairly well. Or we may be running a cement mill here and a flour mill there, and grinding corn somewhere else. And one of the effects of putting all these things together is not only to get cheaper money, not only to get cheaper operating costs, but, Senators, I think you would be surprised in some instances if I would tell you how much cheaper you can get everything by following this plan. We all agree that farmers should diversify. There are many more reasons why power companies should diversify.

A market is more important than the water power, because you might have oceans of water power, and if you had no market it would not be of any use to you. Money and market are the two first things you must get. Water power is secondary, because you can put in

steam at many places and where coal is not near to you you can take your transmission line to the coal.

By way of illustration, let me refer to the Utah company again. In order to get a market that company took over a whole lot of little companies having a lot of little hydro plants. I do not know how many there are, but a dozen or more. I had occasion to go through the cost sheets the other day to compare the maintenance and operating costs of all the hydro plants. Some of those plants we acquired were comparatively new plants, and yet it might interest you to know that the operating and maintenance expense per unit output of those little plants that were thought to be perfection some 8 or 10 years ago as compared with similar cost items at the new plant at Grace, Idaho, was in one case just a little more than 20 times.

Senator SMOOT. One-fifth of the cost of the other plant—20 per cent, did you say?

Mr. MITCHELL. No; one-twentieth.

Senator SMOOT. Five per cent?

Mr. MITCHELL. Five per cent. The fact of the matter is, Senator Smoot, it was a little less than 5 per cent of the cost at the little old one.

Senator SMOOT. You are speaking of the overhead charges?

Mr. MITCHELL. No; I am speaking now of the labor employed to operate the headgates, water conduits, power stations and transformers, and the payments for upkeep on one as compared with the other. This is an extreme case; some of the others run about in the middle—or 10 to 1. I only mention it to illustrate the point.

Now, take the individual load factors or percentage of use of those various old plants. I do not happen to have the exact figures here, but I know in a general way that the average load on our systems as compared to the maximum demand at any time (which maximum demand fixes the amount of our investment, whether it is being actually used one minute per day or a full day) is now approximately 75 per cent, and for a few months, when the copper companies were running full, has been as high as 87½ per cent. Now I happen to know that some of those plants in the agricultural districts that were taken over did not have an average load as high as 20 per cent of the maximum demand. Take, for example, the town of Montpelier, Idaho, which Senator Smoot knows well. It is in a farming community, and they close their stores at 6 o'clock, and during the summer at least the average use of electric service was perhaps not an hour a day. And yet our full investment and operating and maintenance expense was as great as though the people were using current for 24 hours every day.

Now, by tying all these independent systems together, we average up the nonsimultaneous demands, because we get probably a hundred different kinds of business, and the demands do not all come at one time.

I might illustrate that in another way. Suppose there are a thousand elevators here in Washington connected with the Government departments in one way or another. I do not know how many there are, but assume there are a thousand. Now, assume you put in a power plant to run each elevator and assume it takes 50 horsepower to run each elevator, then you would have 5,000 horsepower in the aggregate to run those 1,000 elevators.

Senator SMOOT. No; 50,000.

Mr. MITCHELL. Yes; 50,000. Now, I hazard a guess, based on experience, that if you tie them all together on one big central plant, that, due to the fact that some are stopping and some are moving up and some down, and therefore do not all pull at their maximum at the same time, the actual demand upon the one central plant that runs all of them will not be in excess of 10 or 12 per cent of the sum of the separate and independent demands.

Senator NORRIS. You think the difference would be that great?

Mr. MITCHELL. I am sure of it, Senator. I have had some experience in working on it, and I am sure that is right, and I think it is important to this committee to understand that the same law of economics applies to the power business generally. You have a very important duty here to prepare a bill that will operate to help the people get a maximum of development at the lowest cost. You can not do that without considering the economics of the matter, and the economics of this business, Senators, is just as inherent and fundamental and unchangeable as the laws of gravity. And every governmental body that tries to legislate on it must dig into this thing complicated as it may be, and as difficult as it may seem to you, and you must dig into it in a way to have legislation that is practical that will give the people the benefits of operation along lines that will get the best results.

Let us see what this means. I will take the elevator case, because I think it might interest you: Suppose that it costs $100 per horsepower, for instance, to equip those elevators separately and they required 50,000 horsepower to run them, the cost would be $5,000,000, would it not? Now, suppose you work it the other way and build a central plant, which is good practice, you can then divide by 10—you will need only 5,000 horsepower. Your operation will be cheaper and your investment saving will be enormous. Your central plant will cost only $500,000.

Now, let me suggest one other thing: If you were going to run an elevator, the service should be reliable, and I think you would want the elevator in the Capitol, or in a hotel, or any other place to be reliable. You could not run on one generator all the time, because you have to stop sometimes for repairs; you must have "a spare." So that when you have installed a spare power generator for each elevator you would need 50,000 additional horsepower, each plant requiring "a spare." Your total equipment cost would now be $10,000,000 or twenty times the $500,000 investment needed in a central plant which will do the business much more economically if the central plant, large volume, diversity idea is followed.

In modern practice the small individual power plants are economic absurdities, yet up to a few years ago that was the general practice in each little village and town. They must each have in their little plants a "spare" or else have forced shut downs, and dissatisfied customers. Instead of doing that we tie them all together with a transmission line, which is usually of duplicate or double-circuit type, and then have one spare unit for the whole lot because it is not very likely that you will have more than one unit break down at once.

Now, what I am speaking of, Senators, does not apply to hydroelectric economics alone, but it applies to the economics of any power plant, whether it is run by oil, steam, water, or anything else. The

labor is just the same whether you are running 500 kilowatt machines or 20,000 kilowatt machines. The number of attendants is practically the same, because the big units are handled by machinery. I could show you one of our new stations where you can operate some 40,000 or 50,000 horsepower by just pushing a button in front of you, just as if you were playing on a typewriter key.

You push a button and a 10,000-horsepower switch moves, out in the yard, automatically. Now, having big units, you have the same labor, practically, that you would have for the little ones; you have less unit maintenance cost and the investment cost per unit is not nearly so great. Our experience in the commercial power business has been that by tying all our plants together and covering a wide area, with every possible kind of diversified business that you can think of, we can, in most cases, really take care of a connected load at the customer's premises aggregating from two to four times the actual load at the power station. I told you the ratio for a very large number of elevators is about 10 to 1, but that service is especially intermittent, as you understand, and furnishes an extreme case. But, in the ordinary business, it is from two to four times the maximum demand upon the central plant at any one time. Now, that is a big advantage because each consumer has the full power he can use, instantly available every minute when he wants it, and yet you have some leeway due to nonsimultaneous demands of the customers.

Senator NORRIS. It is a great deal like the depositors in a bank.

Mr. MITCHELL. I was going to say, Senator, it is exactly like the depositors in a bank. Now, you gentlemen understand the banking business. Suppose you had only one depositor at your bank and he had on deposit $10,000,000. You could not loan a cent of that money because he might call on you for the whole thing at any one time. But, suppose you had 10,000 depositors and each deposited $1,000. We all know, from experience, that you can loan three-quarters of it, and there is a case of taking care of 4 to 1, and the new Federal reserve system will increase it to 5 to 1, or a little better, and that is simply because of the benefit that comes from diversification and volume and nonsimultaneous demands. But you can not get diversification and volume in this western country, Senators, unless you get a search warrant and a high-speed automobile or railroad train, or something that will travel over a great deal of territory, because we are new and young out there, and the people and the markets do not exist. You can not get a big market unless you go out and make it.

With our companies, now, we have a central bureau, so to speak, in the East to look up and interest new lines of business. We have people go out and study underground flow of water and things of that kind to work up an irrigation market by pumping the water. We work with the local agricultural colleges, the various commercial clubs, and real estate men, and if anybody wants to colonize—he is the fellow we are after. We go to a concern and say, "now here is a map which shows you where the underground water is and how deep it is; here is a map of the stream which will show you how low a lift you have to overcome to put water on the land; tell us where you want to have your well dug or river pumps located and we will run our wires there." Take low grade ore in Utah, for instance. They are taking out ore there containing as low as one and one-half

per cent copper, and they can only do it with very cheap power; and if it were not for the fact that they have a pay roll of from $300,000 to $400,000 per month, many communities out there would not be on the map. This helps every farmer and business man in that community.

It is the same way in the Southern States. Take Texas, for instance. We furnished some money to help people in Texas start a rural power business two years ago in the black land belt. I think they have tied together something like 40 towns and villages.

I think it will interest you to know what the result was. Many small communities did not have electric service at all; some did not have service later than midnight, because there was absolutely no profit in it. Some of the plants were put in by local men, who did not want their town to be behind some other town; they did it simply as a matter of public spirit. But they never got their money back and never will. And then at 12 o'clock, midnight, they shut down and if you wanted a light you had to use a candle or coal oil or go without light. There were many others which ran all night, but did not run in the daytime. Very few ran in the daytime because the plants were so small that economically they could not do a commercial power business, and there was not enough other business to pay to run during the day. Nobody wanted light in the daytime in a small town like that, and the little plants could not make the price low enough to serve the factories. Well, there were some towns that did not have as high an average use of the investment (or load factor, as some of the gentlemen have explained here), as 10 per cent. There were a few of them that ran about 7 per cent or 8 per cent. The highest of them did not exceed 30 per cent.

There has been built in Texas, in the last 18 months, covering that territory, something over 200 miles of high-tension transmission lines, consisting largely of double circuits carried on galvanized steel towers, many of which are set in concrete; nearly 100 miles of additional transmission line is now being constructed. You will not find anything in California or anywhere else in either hydroelectric or steam power that is superior to the power system that is now in operation and in process of being extended in Texas.

What is the result? By tying all these plants together and diversifying the load, the company is to-day getting an average use of the peak load of about 71 or 72 per cent. Or, to put it in another way, they are doing the same work that was done before with one-seventh or one-eighth as much plant capacity, and at much lower operating expense. And they have service every hour in the 24, and the people who live in the little villages of 100 or 150 population, and some of the farmers, who have houses around through there, are getting the same facilities at practically the same rates as the larger towns.

Senator NORRIS. How did you get your load used?

Mr. MITCHELL. I will tell you that in just a moment. They are getting the same facilities exactly, and at practically the same rate as are charged in the large cities of Texas. Now, to show you that there was a great need for this service I mean in the rural communities I am talking about I merely have to mention this fact. You know it is warm down there in the summer time. There is no time in the 24 hours during this season when they do not need fans. In the towns and villages where the population is small, and of course on

the farms, there was no fan service at all, for the plants closed down at midnight or at daylight. Of course those people could not have fan service. Now, the first summer season they operated this 24-hour rural service, about 5,000 fans were sold in about 70 days.

Now, it seems to me that that was doing good to somebody. And, in addition to that, they connected cotton gins, up and down through the black land belt, and the people liked it. The people who live there want the service extended all over the black land belt, everywhere, and I have not the slightest doubt that inside of 5 or 10 years, and certainly before 20 years you will see a network of wires covering the black land belt entirely, perhaps 250 miles long and 150 miles wide, and this service will be available for nearly every farmhouse and rural community in that entire district.

Now, you ask me how did we raise the average use of the full-plant capacity, or load factor, from, say, 12 per cent on the average up to 71 per cent? It was done in this way: The small company plants could not make a rate low enough to induce the owners of the power plants installed at the big mills and factories, especially those operating 24 hours per day, to shut them down and use electric power instead. They could not make a rate that would shut down the power plants in the machine shops which the railroads were operating; they could not make a rate that could beat gasoline or oil for the gins; they could not make a rate that would beat the power plants of the flour or cottonseed-oil mills, ice factories, or cement mills; they could not make a rate that would beat the well-built pumping plants of the numerous municipalities. But these various plants, being day-load plants, furnished just the character of load which enabled the large central station, without difficulty, to make rates for power lower than the individual plant's own power costs, and enabled the central station to get the business.

Power is also being furnished for interurban railroads operated in these districts that are being covered with high-tension lines. Railroad lines are being built running over the same right of way as the pole lines and using substations in common with them, all of which did a great deal to reduce both right-of-way and operating costs and give a day load. Some of the water-pumping plants are pumping late at night when there is not much other power demand.

Senator NORRIS. After 12 o'clock?

Mr. MITCHELL. Yes; well, they come after 10. And some of the ice plants—they can just as well make ice at one time of the day as another. The plan is to keep the plant, and consequently the investment, working all the time as nearly at full load as it is possible to make it.

Senator NORRIS. And in order to get them to utilize it during the hours of the night you make a rate which is much cheaper to induce them to do that?

Mr. MITCHELL. Absolutely. That is economy. And I want to tell you that these little plants the small developments will never be able to come back. If you tried to make them come back the people in the small towns would not have them, because, they say, "We like the new plan. We do not have our lights go out at 12 o'clock; we have service for 24 hours per day; we do not have breakdowns; the rates are low; and we have the same facilities here that anybody has in the large cities."

Senator SMOOT. You have a good deal of confidence, of course; and I have enjoyed your picture here; but I was wondering what the "yellow journals" would say about your drawing the same picture.

Mr. MITCHELL. Senator, if the "yellow journals" would only go down and talk to our people, I do not think they would have much to say except to commend.

Senator NORRIS. Have the "yellow journals" been pouncing on you?

Mr. MITCHELL. No; they have not said much about us.

Senator NORRIS. Then the others have not, either?

Mr. MITCHELL. No; they have only said some good things about us.

Senator NORRIS. All the journals down there?

Mr. MITCHELL. Yes; all the journals down there; and they are glad to have plenty of power available for promoting industries in their towns, no matter how small they may be.

Senator NORRIS. Do you not have any yellow journals down there?

Mr. MITCHELL. They have not been "yellow" in that respect. They see it is a great thing for their community, and they hear what their neighbors say who do not have the same facilities; and it then becomes a question of local pride. Some of them say: "If this is an octopus, let us have some more, we like it." I always find that if you give the people something they like and can not possibly get so well in any other way, they do not object to that; they always like it. Pardon me for becoming enthused on the subject; I did not intend to dwell on it so long.

Senator NORRIS. It is very interesting. I want to ask you some questions about the lines of electricity now transmitting the power in that particular locality, of the way they are keeping down the percentage lost in the field.

Mr. MITCHELL. I think I can answer that question a little later, by giving you what Mr. Britton told me the other day as to his loss in the Pacific Gas & Electric system.

We have been talking about horsepower in this discussion; where the horsepower is delivered, and what is the relation of the delivered horsepower to the horsepower that is generated. Now, Mr. Britton tells me, and I think it is fair to assume it to be correct, that the sum of his customers' meters equals only about 58 per cent of the sum of his power-house meters. I think that is the point you wanted me to cover?

Senator NORRIS. Yes.

Mr. MITCHELL. Now, I think that is a little bit larger loss than usual; but Mr. Britton has something like 2,000 miles of high-tension lines in his system and the distances are pretty long.

Senator NORRIS. It would depend upon that a great deal.

Mr. MITCHELL. Oh, yes; and it depends on the voltage and how big the wire is, because if you make the wire too large the extra cost might amount to more than the value of the power you would otherwise lose. It is an economic problem and the engineers figure it out on an economic basis.

Senator NORRIS. You want to know, in the beginning, how far you are going to transmit it?

Mr. MITCHELL. And how much it would be worth when it got there, and then see how much it would cost you to save 5 per cent of the

power, or 10 per cent. It usually runs from about 58 to about 70 per cent. That is, the current that you deliver is about that percentage of what you generate.

Senator NORRIS. Along how much of a transmission would that be?

Mr. MITCHELL. It would depend entirely on the distances and how much you cut down the sizes of your transmission wires, and also upon the voltage. The higher the voltage, the shorter the distance, the larger the wire, the smaller the amount of power to be transmitted, the lower the loss. Those things are all figured out and determined, relatively, according to the economic conditions affecting each case. You can make a loss large or small, dependent upon how much money you want to spend and whether or not it is worth while to spend so much in order to reduce loss. It is all a question of dollars and cents in each case. Of course, if there is a big manufacturing plant only a few hundred feet from your power house, the line loss would probably be almost infinitesimal, or at least very small.

Dr. Smith calls my attention to something I think it might be well to mention, that Mr. Britton's statement about delivering 58 per cent, or losing 42 per cent of the power—is for the entire system from generator to the consumer. And of course that includes the loss in the distributing system and in the transformers as well as in the main line.

There have been a lot of estimates here about the amount of water power available. I do not know how much water power there is; but I have frequently heard people say there was not any water power here, or there, or somewhere else, and that they had all the developed and undeveloped power that was any good around there, etc.—and I have generally found that they were mistaken. I have heard it stated, for instance, there was absolutely no water power in Louisiana, Texas, and Oklahoma. I happen to know quite to the contrary.

I have had many illustrations of similar fallacies. I am never convinced by statements of that kind. I usually find that where there are mountains; where there is rain or snow; where there are reservoir sites; where there are elevations of land, there are water powers; all you need is to send somebody there who has a little creative genius and some experience and you will find them. And unless I miss my guess, we will find in the end, that the amount of water power will be constantly growing, just as the estimate of available coal supply has been growing. I surprised some people very much by telling them they were wrong about Oklahoma, Louisiana, and Texas, for instance, in saying there were no water powers there; but we know there are, and with proper reservoir sites they will be very valuable.

Reservoir sites have always interested me. No matter what law is passed in reference to power; no matter what tax or anything else is put on the power business, for the life of me I can not see why any tax, or even a featherweight burden whatever should be put on a reservoir site—a reservoir site that conserves the destructive and wasteful flood waters for useful purposes, for the benefit of everybody down the river. It seems to me that building reservoirs is a public benefaction. And in drafting this bill, I hope the Senators will just consider what it means to save the flood waters to serve a useful purpose——

Senator NORRIS (interposing). I think that is a new idea; and it strikes me as being a very valuable suggestion.

Mr. MITCHELL. And another thing, Senator. If they put all the reservoir sites—and there are a lot of good reservoir sites at the headwaters of the rivers in your State—to useful purposes, it would save a great deal of the flood damage in the spring, and furnish much needed water in the fall. And that would apply not only to your State, but it would go all down the stream clear to the ocean.

Senator NORRIS. And it would help the people of the Mississippi Valley?

Mr. MITCHELL. It would help everybody. And when the low-water season came along, you could run your boats up the river. Now, the Government is spending a great deal of money doing it; for Heaven's sake, if we can get somebody else to do it for nothing I, for one, am in favor of not being slow in our invitations of encouragement. It seems to me that is real conservation, that will conserve a whole lot of good things.

The statement was made that it was economical to-day to put as much as eight times as much money in water installations as in steam, that is, in speaking of Los Angeles. I have not the slightest doubt that Mr. Merrill stated the matter exactly right in that particular case. He also stated that it is customary out there to pull the base loads with water power and to pull the peak loads with steam.

There can be no general rule; every case must be taken up in the light of the peculiar local conditions surrounding it. Sometimes it is cheaper to pull peak loads with steam, and sometimes it is cheaper to pull peak loads with water. Sometimes you have power on a stream where there is no storage and if you do not use all the power in the stream as the water goes by, you lose it; therefore you always pull base load on that stream and pull your peak loads from a pond or a steam-plant somewhere else. Sometimes you have places where machinery installation is very cheap; and where you can get an enormous reservoir that in some cases may hold the entire run-off of the wet season. You can, therefore, hold that power as if it were in a storage battery and draw it out as you like, to make up deficiencies in power at other plants, in case of low water on any of the other streams, or in case of accident at any of the plants.

Now, in a case of that kind, if the water that is in storage gets too low, then you carry some load by steam to prevent exhausting your stored water. If you have not kilowatt hours enough in all your streams, then you will pull some of your base load on steam, because steam on base load, per kilowatt hour, is much cheaper than it is on peak. That is because you can keep your boilers and your engines working at maximum efficiency all the time, and with steam it makes a good deal of difference whether you are running on a 100 per cent load factor, or a 5 per cent load factor. There are cases in the East and some in the West where the base load in the winter season is pulled with water, and the peaks with steam; and in the summer time the water is low and exactly the reverse is done; you impound the water and pull the base on steam and the peaks on water.

Now, in figuring which is the cheaper, steam or water, in any particular case, the way to get at it is to add every item of cost, interest, taxes, depreciation, obsolescence, upkeep, operating expense, and the overhead costs to deliver water power to your customer; and figure exactly the same things as to steam power delivered to your customer.

In other words, you must take every item of cost into consideration in both cases, and you must bear in mind that in the water power it is practically all interest and maintenance and taxes and obsolescence; and in the steam power it is mostly fuel, labor, and taxes and obsolescence. You must figure it not at the generator terminals in either case, but always at the customer's premises, because the steam plant may be near the point of delivery, while the water power plant may be 200 miles away. It may be like a cord of wood in the mountains; it may be worth only $1 in the mountains, but worth $15 per cord delivered at your house. The water power may, in the same way, have a handicap due to the long transmission line as compared with steam near your customers.

Now, I have wondered whether everybody who has been taking a part in this hearing has been using the same language, so to speak; or whether the language used conveyed the same idea to everybody when matters of cost were discussed; and I rather concluded from the testimony that in some things, at least, the minds did not meet.

I want to say to you, Senators, that this is a most technical subject, and, unless it is clearly understood, surprises you more profoundly and completely at times and upsets calculations more disastrously than any subject of which I know. I have known men who would talk about it, and who would make a suggestion that would solve the difficulty almost with a wave of the hand—and they were honest about it. They thought it was easy, but they did not understand it. As the Arabs say, it was a case of "He knoweth not, and knoweth not that he knoweth not."

Now, I think when we are going to dig into a technical matter that we all want to know we are talking about the same thing—and I do not think we have always been doing that in this hearing. There has been a great deal of talk about the cost per horsepower, and a lot of other things here, on which I do not think the minds met at all. I am sure some people meant one thing and others meant something else. Therefore, it seems to me that I ought to say something about it.

It might cost $60 a horsepower to develop power, for instance, at the Pacific Light & Power Co.'s plant at Big Creek; but the cost might be $300 per horsepower by the time it got down to Los Angeles, or it might be $400 by the time it got to the customer. Now, which one of these "horsepowers" are we talking about, and did we take into consideration the horsepower lost in getting down there? Are we always using the same language in this discussion?

A lot of questions were asked about what was the price per kilowatt hour of power in this place or in the other place, or the price per horsepower here and the price per horsepower there. Unless I know the particular conditions so as to get some idea of what the man is talking about, when he tells me he receives so much per kilowatt hour, or so much per horsepower for something, that information is not sufficient to determine whether or not he is getting an exorbitant price or is selling it at a loss. I am left in just about the same uncertainty as if somebody was trying to tell me about length or speed, and said "it was as long as a string" or "as fast as a bird can fly." I think we all have some very general idea of how long any string is that we have ever seen or how fast a bird can fly; but it is not very definite.

To illustrate; suppose you are simply told that John Jones is being charged $24 per horsepower. Is John Jones near the power-house at Big Creek, or is he 250 miles away at Los Angeles? Is the investment $60 per horsepower at a location near the power station, or is it $400 per horsepower for delivery at the end of a low-tension distributing line 250 miles away? Is this price of $24 based upon (1) the average use of power as measured in kilowatt hours actually used by Jones, regardless of the time of use, the rate of use or average use, as compared to the maximum use; or (2) is this power sold on a flat rate, based upon the highest peak during the year, regardless of the average use? If it was based upon (1), or the kilowatt hour plan, regardless of load factor, then we ought to know what was the actual load factor or average use of the particular plant investment, held every minute during the year, for the use of Jones. If Jones used the full power 24 hours a day, and continuously through the year, every kilowatt of maximum demand at Jones's premises would produce 8,760 kilowatt hours as recorded during the year by the wattmeter—this would be for 100 per cent load factor or average use of the maximum demand. This is the basis upon which the company's investment is made, except when there is a gain due to diversity factor; and there is no diversity factor in case where the customers full power is used continuously. On the other hand, if Jones used this power an average of only one hour per day, it to produce the same 8,760 kilowatt hours as shown by the same meter it would require holding plant capacity, with corresponding investment, for 24 times as much horsepower for the use of Jones as would have been required if Jones had used only 1 kilowatt peak, but used it continuously.

Without further information, you are expected to have some idea as to whether the company is charging Jones too much or too little for the service. Twenty-four dollars per horsepower for 100 per cent or continuous use at a point near the power station, might be a very liberal price to the company, as the investment involved is only $60 per horsepower; whereas $24 per horsepower, figured for delivery to Jones on low-tension distributing system, and for an average of only one hour per day, and figured on the ordinary integrating wattmeter basis (which is ordinarily used for computing charges for service to residences) would mean gross receipts to the company of only $1 per horsepower maximum demand, less a deduction for line, transformation, and distribution losses. These losses would probably be about 40 per cent, thus leaving the net amount received, say, 60 cents per horsepower per year of maximum demand at the power station. Against an investment cost of $60 per horsepower in the first instance we would have, in the latter instance, 24 times 60, or $1,440, for power-house investment cost per metered horsepower sold to Jones, plus (on the assumption of $400 per horsepower total investment cost) $340 per horsepower for the 24-horsepower of transformer, transmission, and distribution capacity needed in this case, or a total of $9,600 per integrating wattmeter horsepower investment cost for step-up, transmission, step-down, and distribution investment, for the metered 1 horsepower per year actually consumed by Jones at the end of the low-voltage distributing lines 250 miles away. Stated another way, this income of $24 per year per horsepower may re-

an investment by the company in one case of $60 per horsepower, and in the other case of $9,600 per horsepower, exclusive of losses in transmission and distribution, which would, of course, be ruinous business for the company. We have in one case an income of $24 per horsepower year flat rate measured on peak basis near the power house to pay a return on an investment of only $60. In the other case, excluding for the moment (for the sake of simplicity) the various losses, we have a return on the wattmeter basis, stated to be $24 per horsepower year, but which is really only $1 per horsepower maximum demand at the customers' premises, more than 250 miles away. When we take into consideration that this delivered power to the customer may, after deducting losses, be not more than 60 per cent of the generated power, we see that our equivalent income per horsepower, if based on flat-rate peak measurement at the power station—the same as was done in the other case—now only becomes about 60 cents per horsepower year. Which horsepower have we had in mind so far in this hearing?

We all know that the investment is based on the highest peak load at any time within the year, and it is this highest peak load for which the company must make the investment. This is exactly the same as if you asked a hotel to put on an extra story for your use; you to have the keys to all the rooms and to use all or any part of them at your pleasure and at any moment. It makes a great deal of difference to the hotel man, from an investment standpoint, if you are paying at the rate of so much per day for the use of all the rooms on that floor, whether you use these rooms 30 days per month or 1 day per month or 1 day per year. The investment, taxes, insurance, depreciation, and obsolescence are exactly the same in both cases whether the full facilities are used every day or not at all; no one can tell if the rate of $24 per horsepower year, or the hotel rate, is fair unless all the circumstances are known and considered.

It is the same thing with Mr. Ryan. Mr. Ryan stated that, on the average use or meter basis, the Milwaukee road pays $35 per horsepower year, and on the peak-load basis they guarantee to pay only $21 per horsepower year. That means the railroad guarantees to use on an average only 60 per cent of the investment which Mr. Ryan had to make and to hold there every minute for the railroad to use.

You might charge residence consumers 10 cents per kilowatt hour and get less net out of it per horespower year, or per dollar invested, than if you had a 24-hour 365-days-in-the-year customer and charged him half a cent a kilowatt hour.

I have heard a customer say, "Why, here, my residence is paying 10 cents per kilowatt hour. That is an enormous price. Our cement mill down there (which, by the way, averages 90 per cent use of the maximum demand and is also a large unit) only pays 5 mills per kilowatt hour." Now, you look up the records and find the cement mill is actually paying on peak measurement $29.42 per horsepower year. You look up the residence records and you find that this costumer's average bill for the year was somewhere between $8 and perhaps $14. Then you go to the books and compute your annual overhead expense per customer for reading the meters, testing the meters under the public service rules, rendering the bills, keeping your books, collecting, etc.; and you will find that the average cost is from $10 to $15 per customer;

so that although the customer paid 10 cents per kilowatt hour he really produced no net revenue for the company, because it took his entire bill to pay overhead charges without 1 cent allowance for interest, dividends, taxes, or depreciation, or 1 cent for the power delivered I am only mentioning this to show you something of the pitfalls in figuring out this business, unless we get down to terms, and also conditions, in each case, which every one understands.

I will make one more illustration, suppose the Big Creek plant, which is 250 miles from Los Angeles, had been built by the Government, which operated it and put the current on the wire for your use and free of cost. It might pay to send power down to Los Angeles under certain conditions of use, and under others it might not. You might use a very large number of kilowatt hours in a very short time, and thus by tying up the investment for short peak-load work make the whole investment unprofitable. You might get power free at Big Creek and still it might cost you $10 per kilowatt hour to deliver it at the end of a distributing line in the suburbs of Los Angeles. Your expenses are practically fixed, regardless of load factor or average use of the investment. Therefore how much it costs per kilowatt hour unit naturally depends upon how many units of electricity there are over which you can distribute the expense. The rate per kilowatt hour is the total cost divided by the number of kilowatt hours and you can readily see that if a very small or infinitesimal number of kilowatt hours is transmitted over a system built at large investment cost the rate per kilowatt hour must be very large and may approach the infinite. This is just an extreme case, of course, to illustrate my point—that is, the supreme importance of volume and of load factor or ratio of average use of power to the maximum demand.

Ordinarily the investment and other cost in a hydro plant are exactly the same whether you use the full plant capacity for five minutes or 24 hours per day. Therefore the more you tie these plants together and through diversity get a larger average use of the investment and consequently generate more units per dollar invested, the lower the costs. By this plan the savings of investment and water which would otherwise go to waste usually far exceed the costs of connecting the plants by transmission lines.

I think that really, if we want to get down to brass tacks, and do something practical in this matter, the only way to do it, from the people's standpoint, is to get the greatest possible development at the lowest possible cost, and then have the people say, "We will pay you a certain return on that; and we are going to see that you get your investment back, as far as we can control it without guaranteeing or doing it ourselves; we are going to help you and protect your investment in every way practicable; and we expect you to serve us correspondingly well."

I would go further than that, and say that if Jones or Brown, or a particular company, showed very exceptional zeal and ability in getting the price down and giving good service, and in liberally extending his lines into the surrounding communities to build up the State, I would allow a little bit more than the amount he would get as a mere time server. This would be a personal incentive to spur the operators on to individual excellence.

Now, it seems to me, Senators, that if we want to get capital to use public lands for water-power development, we must go at it in a broad way and in a liberal spirit. We ought to work out some plan that will be fair alike to the Government and the people and the State and the consumers and the investors. And I do not see how that can be done unless we put all these power companies on a parity. It should not make any difference in practical operation whether the Government owns the land or does not own it; but if you are going to regulate intrastate or interstate business, regulate it all alike—make the rules the same for steam plants, water plants, or whatever kind of plant it is. It should not make any difference in the law whether you run a railroad with steam, with electricity, or with gasoline; put all public service on a parity—be fair to the western people. It seems to me that that is the way to get at this thing. Any conditions that you put on the the use of Government lands, that are going to frighten capital, that are going to make operation difficult or hazardous in any way, are just to that extent going to deter people from using them.

Now, I take it that we are all conservationists—real conservationists, I mean—the conservation you see in the hydroelectric operation of the Butte, Anaconda & Pacific Railway shown at the top and bottom of that picture over there [indicating]. I do not mean the picture in the center there, where five locomotives emitting black clouds of smoke are trying to pull eight passenger coaches and three baggage cars over the Wasatch Range. I do not think anybody in this Congress to-day wants the latter kind of conservation, which has been thrust upon us by well-meaning but visionary and wholly impracticable theorists. If we are going to encourage the practice of conservation by using water power and not unnecessarily using coal, there should be no incubus put on the use of the Government lands for public purposes.

The trouble has not been about the little tax which has been levied so far. Just as Mr. Ryan said this morning, it is not bothering the public-service companies; they naturally and necessarily, under regulation, pass it on to their consumers. Therefore the legislators are dealing with the consumers. If they want the consumers to pay the tax, and if they prefer to raise a revenue by taxing a business instead of taxing property, and the people who are thus involved with Government land will stand for such special taxes, that is a matter wholly between the legislators and the people. It must be realized that people patronizing plants involving the use of Government lands must pay this tax as a burden in addition to those which the patrons of other power plants must pay.

The tax feature does not interest me, unless made so high that it restricts the use; because if it restricts the use it restricts the development of the section in which we are operating, in the first place; and in the second place, it sometimes happens that 50 cents or $1 per horsepower Federal tax might determine whether you would put in water power or steam. Consequently, it seems to me that all of those things should be considered. But, so far as the investor is concerned, he does not care; he must get his returns anyhow, no matter what the tax is, so long as it does not throttle a great deal of the business and make it impossible to grow and develop new territory and take on new lines of business, and get more volume and thus reduce cost to the people.

If the Federal tax is not intended as a revenue measure then there is no possible excuse for it. Any Federal tax must be in addition to State taxes as the State can not legally levy special taxes on a particular company but must tax all power companies uniformly. The idea that the Federal Government is levying a special tax on the plant output in order to reduce the cost to the consumer is, of course too absurd to be seriously considered by anybody.

But the one thing that does affect the investor in another way, and is absolutely vital, is section 5 of the bill, which I hope the Senate will consider very carefully. Suppose a company had 15, or 20, or more plants. Take the Pacific Gas & Electric, for example, as an illustration—merely because it has a lot of plants. Suppose some burdens were imposed which they thought especially objectionable, and those burdens were imposed as in this bill only because a particular development uses a few acres of Government land, and suppose that in addition to giving the Government an option to take over the particular project in which Government land is involved and on conditions, under the terms of the bill as written, which prevent the company from claiming any value for the real estate beyond its original purchase price no matter when bought, and at the same time makes it very probable—under the terms of the bill—that the company will not be able to get back its investment in the other property, and then suppose, as in this bill, the developer is further coerced by being forced to agree that these onerous and dangerous terms shall be extended to the entire system. As I read the bill, the Pacific Gas & Electric Co., for instance, would be deprived of any enhancement in value of its other real estate amounting to something over 40,000 acres and having a value to-day, I am told, of over $12,000,000, and including very valuable city real estate for offices, substations, and powerhouses in Oakland, Sacramento, Stockton, San Francisco, and elsewhere. Some of this property was probably purchased as far back as 30 years ago. Is it reasonable to suppose that the stockholders of any company will ever consent to an investment involving the use of a few acres of Government land if by doing so all these onerous conditions must be attached to and injected into their whole property system which they have pioneered and owned for more than a quarter of a century? If the onerous conditions are localized they might say, "Well, we have $60,000,000 or $80,000,000 invested in all our plants; we can afford to take a speculative chance or gamble on a million-dollar hydro-installation with a reservoir which floods a few acres of Government lands. If we lose the reservoir, we are not broke, and if we do not lose it, it will reduce power costs and help out our consumers very materially—the State commission will see that the people get the benefits."

Therefore, they may agree to the conditions which they do not like at all, if they are limited in application and there are enough compensating advantages to warrant taking the chance.

Suppose, however, as in this bill, you say that in addition, these burdensome and dangerous conditions, affecting small particular property rights, must also apply to the whole system. Then it becomes a very different matter. This illustration may not sound well, but I think will aptly bring out the point; there are, perhaps, a great many people who, if the inducement is sufficient, might be willing to risk the tip of their little finger by letting a snake bite it, or by touching

somebody who had leprosy, or becoming infected with some other dreaded contagious disease so long as the danger could be isolated and confined to the tip of that small finger. In other words, they might be willing to cut off and lose the small finger if necessary; they could still get along pretty well. But would any man take that chance if he had to subject the entire body to such danger?

Now, I do not mean to make this illustration in a disparaging or odious way; that is in no way intended; but this bill goes far beyond a particular project built wholly or partially on Government land, and undertakes to reach out and depreciate the values underlying millions of dollars worth of other property which may have been in private ownership for years, and has absolutely nothing to do with any new development on Government land, beyond being connected by wire lines. It seeks, in effect, to coerce the investors in existing property to give the Government an option on their property for 50 years or longer. Now, options given are not assets; they are clouds on the titles; they are liabilities. This bill makes it worse, by attempting to force an option to take over old, well-established and very valuable property, under less fair conditions than are now guaranteed to every citizen under the law and the Constitution.

If it be desired that any Government land be used for power purposes, and if it be insisted that there be retained in the bill any of the onerous and dangerous confiscatory clauses which now appear there, it is extremely important that these dangers—like disease or poison—be isolated and confined only to the particular spot or project involved. These dangers should not be forced, nor even be allowed to spread over the large and very valuable existing properties now covering wide areas with transmission systems. These are matters which are infinitely more important to investment capital than the question of a few cents or dollars per horsepower per year, which the investor feels is entirely a matter between the Government and the consumers.

There have been a lot of conflicting statements about the under or over development of water power and market in California. It was stated, among other things, that the installed capacity of hydroelectric machinery is something like 44 per cent more than the maximum market demands of to-day. I think it will help the committee to clearly understand this matter if I mention the fact that usually the installed machinery is somewhat in excess of the minimum stream flow power capacity. The reason for this difference is the necessity for having one or more spare units somewhere on the system, and also the fact that it is always good business to tie together with transmission lines as many streams as possible. Some of these streams have a large winter and spring flow, while others have a large summer and fall flow, due to their being fed by a combination of glaciers and lake storage reservoirs. For instance, there might be 60,000 horsepower for eight or nine months on a winter and spring flow stream, and yet the summer and fall flow might drop down to 20,000 horsepower. Of course 60,000-horsepower machinery would be there just the same. On the other hand, the glacial and lake storage stream might be developed for, say, 60,000 horsepower in the summer and fall, and yet in the winter the water might freeze and drop down to 20,000 horsepower.

This not only illustrates the advantage of tying streams together but also shows why the installed machinery capacity is, in the aggregate, much larger than the aggregate primary or constant power during the 12-month period.

Now, as to the matter of regulation, I do not think the investors whom I represent care whether they are regulated by the State or by the Federal Government; they know they are going to be regulated. All they want is fair dealing and a law so plain that they know what their legal rights are before they put in their money, and then an assurance that the laws as to property rights will not thereafter be changed to their detriment. I find that a great many eastern people and a few western people prefer Federal regulation. I find, however, that nearly all western people prefer western regulation.

Senator NORRIS. State regulation?

Mr. MITCHELL. Yes. I think it is only fair, however—and it is certainly interesting—to give some of the reasons expressed for these preferences.

Some of the eastern investors prefer Federal regulation because it costs a great deal of money for the consumers to come to Washington to push complaints, or attend public hearings, relating to rates and conditions of service; and it is thought that this fact would be likely to shut off many kicks, particularly by small communities who can not well afford the expense of coming to Washington. Even if this should be overcome by the Interior Department opening branch offices in each of the Western States and putting the same in charge of a junior officer of the department with power to act promptly on the spot, some of the eastern people still feel that regulation exclusively by the Federal Government would be advantageous, because it would probably be uniform in all the States in which those people own property. Besides, a doubt has been expressed as to whether or not a civil service official, or even an appointive official from Washington, would be as sensitive to local sentiment and desires as would be the case with an elective or appointive commissioner under State law. Other investors have expressed the opinion that no public service, whether privately owned or municipally owned, can prosper and last unless it is keenly alive to the necessities of each local community and wholly subservient to an enlightened local public opinion. They say that this policy can not be successfully carried out unless the regulating body is likewise affected by propinquity and amenable to local sentiment; that the State utility commissioners who expect to remain in office must necessarily be affected by the interests and desires of the consumers on the ground with whom the State commissioners must necessarily be in close and continuous contact.

Now, I think the important thing to avoid is two conflicting jurisdictions. There is no difficulty on the question of interstate commerce. Of course, any business that is really interstate is subject to the jurisdiction of the Federal Government. But if any law is made to cover interstate electric business, I hope it will be made a general law applying to all power companies alike, no matter where situated or how the power is generated. I also hope that if such a law is made, it will be gone into very carefully to provide for the inherent differences between electric power and freight and other

commodities whose shipments are now regulated by the Interstate Commerce Commission. You may have a power line in one State that runs over into another State—and the modern tendency is growing very rapidly toward having three or four or five States all interconnected and interchanging power one with the other. Usually, there are a number of hydroelectric plants in each State all feeding into the one system. This is a splendid thing. I will give you an illustration of how it works, if I may digress for a moment.

There are power lines which run from Cheraw, S. C., as far north as Henderson, N. C., and they go as far east as Goldsboro and Lumberton. Now, that company connects between Raleigh and Durham, N. C., with another power company. This second power company goes on west and connects at the Georgia State line with a Georgia company. That particular Georgia company goes down through Atlanta to Newnan, Ga., and connects with another Georgia company that goes down to Columbus, Ga. It also goes from Atlanta to Rome, and from Rome it goes north to the Tennessee line, and there connects with the Tennessee company, which in turn goes to Chattanooga and Nashville. I do not know how many miles of line there are all told or what the extreme distance is, but say, roughly, about 1,200 miles.

This is not a case of common ownership at all: they have interchange power contracts. That is, when one concern is short, as may well be the case in the dry season, its wires are connected with the wires of another concern on entirely different watersheds which may have rains and plenty of surplus power, and perhaps before the summer is over the conditions may be reversed; they settle with each other on balances in a manner somewhat similar to the settlement of banks in clearing houses.

Now, suppose you have a case where the same company has generating plants in two States, and these plants are all connected to the same transmission system crossing the State line. If it was freight or express you could handle the situation easily; you could mark and follow each shipment through to its destination, and you would know just what you carried from this State to that State, or vice versa. But in the case of transmitting electri ity between different States where power is generated at each end of the line, you put the electricity on your wires, and one minute it is going from the first State into the second State, and the next minute perhaps it is going the other way, from the second State into the first; or perhaps it will go for six months one way and for the next six months go the other way. You are generating and selling electricity in each State, and you can not possibly tell where any particular part of it comes from. You may know in the aggregate how much goes one way and how much goes the other way in any given time by the use of proper instruments, but the delivery back and forth across the line is always to your own system of wires, and with regard to the particular electricity that you are selling to a particular man in a particular town you can not say whether it is generated in one State or the other State. It is exactly as if you were at the mouth of Chesapeake Bay and you found a certain amount of fresh water in the salt water, and you tried to determine how much and which particular fresh water came from Maryland rivers and how much and which came from Virginia rivers.

Electricity is not a commodity, it is a service; the time or the hour of the day when it is rendered, and the rate (this means speed, not price) at which it is rendered, is frequently much more important than the amount of the service.

I once had something to do with a city which wished to pump domestic water into a reservoir. It asked me for a bid on a straight kilowatt-hour basis for a certain number of kilowatt hours available at any time and in any amount during the year as desired by the city up to the total sold. I made a bid of 5 cents, but I told them if they would let me write the specifications I would guarantee to bid less than 5 mills. They had a large reservoir which held nearly a week's supply, therefore it was immaterial at what hour the pumping was done, and I wanted to use waste power after 11 o'clock at night to do this pumping. And I had quite some argument with the city council of that city, who did not understand that electricity was a service and not a commodity. One of them happened to be interested in a barber shop, and I gave him this illustration; I could not get it through his head any other way:

"Suppose I bought 50,000 shaves from you, would you be willing to sell them to me at a reduced price? Your regular price is 25 cents; would you sell 50,000 shaves to me at 15 cents each?" He said "Yes; I will sell them at 10 cents a piece." I said, "Can I get these shaves at any time I want them?" He said, "Certainly, you can get them any time you like." The council was sitting in the committee of the whole, and I suggested that they adjourn, so that we could draw up my contract with this barber. When we came to draw the contract, everybody was laughing; they saw a joker somewhere. I put in the contract that I wanted 50,000 shaves and I wanted them between the hours of 12 and half past 12 on Christmas eve. He then saw the point. [Laughter.]

I would like to call the attention of the committee to the very important fact that money is of much greater importance in the water power business than in other businesses, as, for instance, the mercantile business.

I can not give you the idea any better than by reading an extract from an address which I delivered before the Transmission Section of the National Electric Light Association on April 8, 1911:

Again, let us compare the investment necessary in the two classes of business in order to get a clearer comprehension of the subject—

I was speaking at the time of a mercantile business and a power business

Actual experience shows that, averaged over a term of years, there is required in generating, transmitting, and distributing hydroelectricity, $5 to $10 investment for every dollar of annual gross receipts collected. In other words, hydroelectric companies require from 5 years to 10 years to turn over their capital once, whereas many mercantile establishments turn over their capital from four to eight times in each year. Suppose, for the sake of illustration, that it takes $6 hydroelectric investment to get $1 per annum gross revenue. This means that it would take six years' gross receipts to equal the capital invested. On the other hand, if a merchant turns over his capital six times in each year (that is, collects $6 annual gross receipts for every $1 capital invested) he turns over his capital 36 times as often as the hydroelectric company, and 1 per cent profit to the merchant on each sale will yield him as much per year on his capital invested as 36 per cent profit on the hydroelectric company's sales. In other words, on these operating ratios, to make the same annual profit the hydroelectric company must invest 36 times as much as the merchant even if the latter does business upon the unusually low profit margin of 1 per cent. How many

people realize how strongly the economical development of water powers, and the charges for their service to consumers, are affected by the price which must be paid for their development money?

Something was said about the Oregon Water Code in these hearings the other day, and it occurred to me that there are certain facts in reference to that code which it might interest the committee to have brought out. I happen to know a good deal about that code, why it was formed, and how it worked. I want to say that in this case, and in a great many other cases—for instance, under the Ontario law people have said the laws are splendid and are giving perfect satisfaction and developments are going ahead under them when, as a matter of fact, such is not the case. Some gentleman sent a telegram here the other day to Mr. Merrill, showing enormous development alleged to have been made under the new Ontario law. My advices are that that is not correct, when you analyze down to the meat of it. In other words, there have been developments up there, but I am told they were developments where the rights were acquired under the old law and not under the new law. It is true the developments have been made since the new law went into effect, but the law was not retroactive.

In Oregon I know that is the case. We have two classes of States in the West, so far as their systems of water laws are concerned. One consists of the Roman law States, created from the Mexican cession and the Louisiana Purchase. All the other States that came into the Union were common-law States, and in these latter States the riparian-rights law prevailed, the same as in Massachusetts or Virginia, until changed later by constitutional or statutory laws. The result was that until about 1891—when, I think, the law was passed in Oregon—the riparian law was in effect, and by that act the State went over from the laws of riparian rights or the common-law doctrine to the Roman law or the doctrine of appropriation.

Now, clearly, Oregon could not pass any law taking away riparian rights, which had already become vested property running with the land patented prior to the enactment of this Roman law or appropriation doctrine. Well, what was the result? A great many streams in Oregon where there are water powers were on lands that were already patented before this law was changed. The owners of those lands were the riparian owners of the water that flowed by their lands, just as much as they are in Massachusetts, or in England. Nobody could get it away from them under an appropriation or otherwise, except by purchase or, of course, by condemnation for a public use.

Now, my company has furnished the money for a number of developments in Oregon. Not a single one of them is on land under this new law. Every one of them is on land which had been patented before the enactment of this law, and the company has an absolute and complete title to that water as riparian owners, as fully as it could have in any riparian State on earth.

About two years ago the Pacific Power & Light Co., which does business both in Oregon and Washington, and which has about 450 miles of transmission lines, serving a rural territory with many irrigation power pumping plants, found that it needed more power. It was a question whether the company would develop the additional power on the Walla Walla River in Oregon, or at one of several avail-

able sites in Washington. Engineers were directed to look into the matter to determine which was the best power site for the purposes of the company, and after an investigation they reported that the most desirable site for its purposes was on the Walla Walla River.

Then the lawyers of the company took up the legal questions involved and examined into them, and they said to the company, "All right, you may locate there, but if you do we will have to say in the opinion which you want in connection with the sale of the securities, that you have no perpetual right to use this power, but have only a 40-year tenure under the Oregon Water Code, because the land on which that water power plant must go was patented since the enactment of the Oregon water law." The matter received careful attention by the financiers, and after much discussion the company went over to the Washington side, made an investment of nearly $1,000,000 there, and did not get as good power plant as could have been obtained in Oregon. That was done because they could sell the securities of the company so much better when the plant was located in the State of Washington, where water rights are good as long as used.

Senator NORRIS. You say that the riparian law was originally enforced in Oregon?

Mr. MITCHELL. Yes; the riparian law was effective in both Washington and Oregon, originally, and is in force in both States to-day as to lands patented before the adoption of the constitution in Washington and the passage of the new water law in Oregon. In Washington, after the adoption of the new constitution, the Roman law of appropriation went into effect, but of course that only affects lands subsequently patented.

In general the Oregon Water Code is excellent. It has done a great deal of good in the way of straightening out water titles. I am informed, however, that the framers of that law have concluded that the provisions relative to water powers ought to be changed; and I think in reaching that conclusion they were influenced by the same reasons that governed in the specific illustration I have given. They do not want to have to pay higher interest rates or higher power charges or to have higher amortization charges by reason of the limited and comparatively short tenure provided by the present law. They now say that, as long as a man uses the water for the public good, he ought to have the unquestioned right to use it, and that this law ought to be changed. I understand that a bill is now being drafted to bring before the Legislature of Oregon with the view of changing not only the short term part of this law and making it indeterminate, but of putting the use of water under State regulation.

I think, however, in referring to the Oregon law, it might be well to say that the framers of the law intended it to be absolutely to the best interest of the State and of the developers who do things, and it has worked out that way except as to water-power tenures. I would like to read to the committee on extract from page 7 of the Oregon water law, showing the charges for power:

> Twenty-five cents for each theoretical horsepower up to and including 100 horsepower, and 15 cents for each horsepower in excess of 100 up to and including 1,000 horsepower, and 5 cents for each horsepower in excess of 1,000 horsepower up to and including 2,000 horsepower, and 2 cents for each horsepower in excess of 2,000 horsepower.

These are the charges per year; I thought it would be interesting to the committee to see what their idea of charges was.

Senator NORRIS. That is, you would have to pay these amounts to the State in the State of Oregon?

Mr. MITCHELL. Yes; you would have to pay those charges to the State, and if you had to have a Federal permit you would have to pay the Federal tax in addition. Now, our people did not go over to the State of Washington for their additional power on account of those payments. That was not it at all, because there would have been no difficulty in passing those charges on to the consumers. It was the 40-year business that scared them out.

Senator NORRIS. Well, would there be any right to a renewal?

Mr. MITCHELL. Yes; there is a provision in this law that you have a preference right to renew, but no provision is made fixing the terms of such renewal, and there is always under such circumstances the possibility and the fear that the State might exact confiscatory terms of renewal. The company would be helpless because there is no provision in the law for taking over the property in case of disagreement as to the fairness of the terms of renewal. Consequently the only safe way, we thought, would be to amortize, and the people do not take kindly to the amortization of a whole plant, because it would either raise the rates for power or, in any event, defer the dates when power rates would otherwise be lowered, which we always plan to do as our business grows. The people want and expect the service to be extended and the rates to be gradually lowered, and if tenures are made free from uncertainties and made secure and permanent, and plant amortization made unnecessary, there is no reason why the people should be disappointed as to any of these matters.

Senator NORRIS. If it were amortized you would have to get a very good price for it, would you not?

Mr. MITCHELL. Yes; but the farmer will say, "Come and see how poor we are; we can hardly pay $2 or $3 an acre for pumping water on this alfalfa land as it is." They will say, "Posterity will get more out of this than we will, because they will find the soil already cleared and irrigated, communities established, and land values created. When we came here we found only sagebrush, horn toads, rattlesnakes, and coyotes. This is all in favor of posterity. Why not do something for the pioneer, who is making all this possible?"

There is one other thing which I wish to call to your attention. In this bill there is no provision for appeals or judicial review. Let me read you what the Oregon Code provides, and that is in a State where the controlling authority is made up of three men, and not of one, as in this bill. Here is the law of Oregon on that subject:

SEC. 5. Any person, firm, or corporation who believes himself or itself injured in any material right by any decision of the board of control shall have the right of appeal from such decision to the circuit court for the county in which the proposed appropriation of water is situated.

That is in reference to whether you get your permit, or to the handling of it, or anything else. The board of control can not arbitrarily refuse anybody; if he complies with what they figure out as being the proper specifications which refer principally to how they shall do the work and not as to the use of the power, except that there are certain uses to which preference is given over others, such as domestic purposes, irrigation, etc.

And there is one very good thing about this provision that I have read; it has worked well. The people do not complain that there is

arbitrary action. Some man may make a complaint on some question and the board will say to him, "While we think this ought to be done this way for the good of the people of the State, if you think you are being unfairly treated, you can go into court and ask for equitable relief." Sometimes they go into court in such cases, but usually they do not; but if they did not have the right to go into court, they would never cease making complaints and thinking that they have been arbitrarily and unjustly treated.

There has been something said in these hearings about the question of monopoly.

Senators, I hold no brief for monopolies in the sense in which that term is ordinarily used, but every public-service concern is inherently a monopoly in the particular field which it serves exclusively. If a public-service company is properly regulated, there is no more danger from its being a monopoly in the district it serves than there would be if the State, county, or municipality carried on exactly the same business as a monopoly in that same district. One is just as much a public agent and servant of the people as the other and one is just as responsible and answerable and amenable to the will of the people as the other. There has been some talk by advanced thinkers that even railroad monopolies might be justified in certain cases and under proper regulations, but I would like to call your attention to certain inherent differences between the service of any particular town by one railroad as compared to the service of that town by one power company, even though they both be regulated with equal effectiveness. Suppose we take the city of Cincinnati for example. What do we have there? A few railroads running to the West, a few running to the East, a few to the North, and a few to the South, with perhaps a lot intervening like the spokes of a wagon wheel. All center in Cincinnati. What do they do? Each and every railroad goes out and opens up an entirely new or different country, brings in new people to trade, and brings in business and trade from every direction. I want to say that in the West they like a good many railroads and they strenuously object to being called "a one-railroad town." They want railroads that go to the North, to the South, to the East, and to the West; they want to reach all the country possible.

People do not have the same objection to being a one power town, if the community is treated right and we try to treat them right and I think all power companies will try to treat them right as soon as they learn what we have learned, and that is that it pays to please the people. I have explained how the many divergent railroads help. But suppose you have two power lines, or two street-car lines, or two gas pipes or two water mains running parallel up and down the same street, each one of the same character and each equipped to fully satisfy all the customers on that street—what possible use is there for duplicating these outfits? We know that it costs twice as much to build them both, and there are two investments for one service and two sets of employees for the one service. People use no more and no less light and power because of the fact there are two companies operating there instead of one.

Senators, as I see it, an exact parallel would be to have on every railroad train a duplicate mail car and two sets of railway mail employees. In every town there would be two post offices, one on

one side of the street and one on the other; there would be two sets of mail carriers, one in blue and one in gray, and when you got a letter they would both hold a corner of it and hand it to you. I do not think you would get any more letters nor would you send any more letters on account of having the two mail services, but you would simply pay 4 cents postage instead of 2.

That is the way I look at this thing—from the standpoint of practical economy. Of course there are also some economies due to larger volume, if there is only one company, which may be nearly as important in reducing cost as the fact of cutting the investment in two if there is only one company.

One other thing. We were talking here the other day about dams like the one at Green River that was to be built primarily to irrigate 200,000 acres of land, and of the fact that practically all of the power went to waste in the wintertime, and a good deal of it went to waste in the summer time. Yet, in figuring out what was the main purpose of irrigation under the department's construction of the law and I do not say whether it is right or not, because I am not a lawyer—the law was so construed in the letter of the Secretary of the Interior, under date of August 21, 1914, to the Commissioner of the General Land Office, as to prevent the irrigation company selling the waste power that the irrigators could not possibly use, the substantial effect of the decision being to limit the use of the water and the power under the grant to the mere wetting of the soil of the particular project. The logical interpretation of that is that you would have to provide for the irrigation under one act and the power under another act, and there might be conflicts between the two because if you have a permanent title on your irrigation plants, then you could only use your irrigation plants to wet your soil and to pump water on the project; that is, wet the soil by gravity or pump water on it.

It seems to me that the use of water and Government land for the main purposes of irrigation ought to include I do not know how the law defines it, I am talking as a layman power to run flour mills, to pump water for domestic purposes, for cooking your dinner and heating your home and lighting your houses and running your fans, for your alfalfa grinders, for your electric vacuum cleaners, your incubators, for the electric railway to haul the produce to market, and for each and every purpose for which you could possibly use it; to reduce household drudgery, to encourage home building and contentment, to spell a better country life. It seems to me that these are, or should be, the main purposes of irrigation and that the mere wetting of the soil is only one of the incidental necessary steps to reach the real main purpose of irrigation. Again, why should not any irrigation project be allowed to reduce its investment and operating costs by arranging with any power company to buy the winter power not needed on the project and the surplus summer power or to help out on the construction costs in exchange for the waste and surplus power? If this is a good thing in Arizona and in the Minidoka and Boise projects, why should not the Green River irrigation farmers have the same privilege?

When the Government has reclamation projects, it takes into consideration these things. Take, for example, the Roosevelt Dam The Government sells power to the public utilities in Phoenix, and

to the mining camps at Globe, Ariz. Or take the Minidoka, Idaho, project and the Boise project; they both sell power to distributing concerns. The net proceeds of all these sales are used for the benefit of the irrigators on the Government projects. I am not finding any fault with that; I am not finding fault with anything that is done in the reclamation business, except that they do not do enough of it. I want more of it; I want all the irrigation and the development that we can get.

If that is a good thing, when the project is built under Governmental control and supervision, and I believe it is, why should not the same economic principle be applied where the State, or anybody else, builds the project, under the Carey Act, or under any other law, State or Federal? Why should there be this discrimination against the State projects, especially when the State owns all the water? It seems to me that it is perfectly foolish to have to have one concern for irrigation to merely wet the soil and then have to go out and get another concern, under another law, perhaps, to enable you to light your homes, and pump your domestic water and grind your flour, and perhaps operate an electric road to take your products to market.

Now I think it is important that we should do everything we can to build up those communities. There is no use looking for much new market in the cities; that is well taken care of already. The only way you can build up these arid States is to go out into the rural communities and, together with the railroads, help to build up irrigation districts, which will in turn help to build up the cities and the States. I believe that if these irrigation people have some incidental or waste power that they can not use the Government should say to them, "Get all you can out of it and if we can help you, call on us." Irrigation pioneering is at best difficult and hazardous and needs all the encouragement the Government can give it.

Now, it seems to me that this is very little to ask for the western people, when you figure that the steam railroads have built up the country over rights of way granted in perpetuity by the Federal Government. It has been a good thing; the railroads have been built up on those rights of way. You can now get all the permanent rights of way for railroads and for county roads and irrigation that you desire; that is a good thing. On the Government reclamation projects the farmers can pay the cost and get full benefit of all the works. Now, I am not saying that that is not the right thing. I think it is a good thing; but whether it is a good thing or a bad thing, I do not see why the same rules should not apply to projects under the Carey Act, or to any other irrigation district. I do not see why they should not all be given equal privileges all the way through. I think they should all be dealt with liberally.

There is one thing that I might say, which perhaps might be interesting to the committee, in the matter of regulating the security issues of these companies. I know that there is a great deal of difference of opinion on that subject, as to whether or not it is a good thing. Now I know that some of the people who are in favor of regulating security issues are influenced a good deal because sometimes bond houses send out circulars stating that the securities they are selling have been passed upon by the public utilities commission of this State, or the other State. I want to say to you, Senators, that merely puts a brand of respectability on those securities. There

is no guarantee whatever as to the actual physical value back of them, how good they are, or as to how marketable they are going to be, all of which are very important matters.

Now, you can not get cheap money, and plenty of it, unless you have both the brand of respectability and the brand of quality. Respectability is necessary and commendable, but quality does not stop with mere respectability. Respectability means only that the people are honest in putting out these securities, and that they have told the truth as they saw it. It does not mean at all that these securities have been thoroughly investigated and have the brand of approval of the most experienced and successful houses, who always dig below the surface of things. It does not mean at all that these securities are safe and profitable. The best way to get cheap money is not to put too much store upon yield and speculative values; it is a great deal better to be conservative and understate rather than overstate the facts, and by your acts to justify the reputation for being conservative and for handling only safe investment securities rather than to try to raise money by the large number of beautifully colored certificates and painting visions of fancy profits. Large amounts of money are not raised that way, but just the reverse.

The investment houses that are really doing the big business nowadays send their own engineers and their own counsel to investigate searchingly the titles from the beginning down to date, the franchises and everything else. They get the opinion of the local lawyers and of their eastern lawyers. They send out one, and on matters of very great importance sometimes as many as two or three, absolutely independent engineers, who go over these properties and report on them, without conference among themselves. That is all done to find out all about the physical condition of the property, all about the present and future business prospects, and above all, to know what physical replacement value that company could depend upon either in a condemnation suit or a rate regulation suit. Then they will make the bond issue below that, so as to be sure to have a substantial equity in back of the bonds. In addition to these investigations, the best investment houses now invariably put clauses in the mortgages providing that the lien shall automatically cover any additional or afteracquired property, real or personal, and wheresoever situated, as the utility company makes extensions, improvements, or additions to its system. They also provide, by most carefully drawn provisions, against any liens or claims coming in ahead of that mortgage, and also against the issue of any further bonds under that mortgage, except for not more than 75 or 80 per cent of the reasonable value to the company—which must not exceed the cost—of further property put under the mortgage and then only provided titles to the additional property satisfactorily comply with the requirements of the mortgage, and then provided further that after the payment of all expenses, maintenance, taxes, and other charges of every nature and kind whatsoever, including an allowance for obsolescence (if not cared for by sinking funds), the remaining net earnings are equal to at least twice the interest on the bonds then outstanding, plus those sought to be put out. The important thing in a mortgage of that kind is not what the authorized issue may be, but the covenants in the mortgage as to the protection of the security and the restrictions as to the issuance of further bonds under the same mortgage. All of these

bonds, of course, being pari passu with the others issued under the same mortgage. These mortgages always, of course, provide for the keeping up of franchises, complying with all State and governmental regulations, and that sort of thing. During the last few years I have not known of any first-class bond house that has purchased any bonds in any way based upon revocable title permits from the Government Many companies, however, which were involved with Government land in this way have sold bonds, but so far as I know this has not been done in the past few years, except in cases where there was ample security for the bonds exclusive of any property located upon Government land under revocable permits. The practical effect of this is to restrict developments on Government land to the large existing companies which have sufficient other property and good enough general credit to get money without relying upon, and wholly independent of, any generating plants any portion of which may be located upon Government land.

Now, suppose you should get out bonds for 80 per cent of the cost, and you sell them at 90. That gives you 72 per cent of your original cost. Suppose your original cost was $10,000,000, that means that you would get on your bonds $7,200,000 and you have got to raise $2,800,000 in some other way. And if anybody thinks a company can do that out of earnings and at the same time have material growth, and still pay anything in the way of dividends, I want to tell them they are very much mistaken, because they can not. I am speaking from the book of experience. And if you can not get additional money by selling additional securities to the public you are going to be in trouble, if you are growing very much. If your company is not pushing the business or is in a dead community where it can not grow you might take care of the consequent slight expenditures for improvements by using the earnings. But most of the western concerns are operating in growing communities which require up-to-date methods. They are growing fast. You may double your business in, say, four or five years, and double your investment, perhaps, in seven or eight years. There is a difference here, you see, between growth and expenditures, because as you grow and can use large units and get diversity of use of output, the money required does not increase in the same proportion as the plant output.

Whether or not any commission approves the issuance of securities will not, in my opinion, favorably influence 1 per cent of the investors of to-day. The most conservative investors—and it is from them that we get the cheapest money—rely principally upon the results of the legal and physical examinations made by the lawyers and engineers of the large investment banking houses which put out the securities and in whom they have confidence. Investors prefer to buy from those houses which dig into these things most thoroughly, and upon whom the history of the past has shown that investors are justified in relying. My experience teaches me that the character which a public utility commission's authorization gives to any particular security is not especially helpful in selling the same. I know by the same experience that the necessity for waiting to get such commission's authorization for the issue of securities sometimes causes great embarassment and actual loss to the company, due to the fact that many of the commissions are overwhelmed with work; and in

many cases it has been absolutely impossible to get prompt decisions by the commissions as to security issues. Good security markets—like sunshine—come and go. The only time to get cheap money is when you can. Delays are dangerous. When you get a good trade close it; if you wait you will probably lose it. We had a case in a middle west State where we were tied up for over 15 months. We got a decision only a few days ago. There was no way on earth that we could get any quicker action, but in the meantime market conditions are not what they were when we first asked for the authorization. This delay has cost us two points on $1,200,000 of bonds, or a loss of $24,000.

We had a case the other day where a commission, after 12 months delay, allowed us to issue about $200,000 of bonds at the last minute, only on the condition that the new bonds issued should never be redeemed at more than par. Now here was a mortgage with an authorized issue of $5,000,000 redeemable before maturity at 105 and with a provision that each bond should be of like tenor and effect as every other bond, each being pari passu with every other. Yet this commission required a different provision for an issue of about $200,000 of these bonds, by saying that the bonds could not be redeemed for more than par. We said, "How can we sell them to the investor?" He will say, "That is not a good delivery. I see in the newspapers the current price quotations on these other regular bonds, which are issued according to the mortgage, and I can buy and sell those bonds by telephone. The other bonds without that special provision are well known and have an established market; they are good collateral in any bank in New York City or Philadelphia. These bonds don't look right to me anyway because the mortgage says that "each and every bond secured thereby shall be alike." We say, "Yes, the commission had to agree to this as a legal proposition, but insists that these new bonds shall be stamped showing that if the entire issue of bonds is redeemed at 105 before maturity, as the company has the right to do under the mortgage, the holder of this bond is, by the clause stamped on the face of it, estopped from claiming or receiving more than the par of the bond." The investor then says, "but if I go down to the banker and try to sell these bonds, or put them up as collateral for a loan, the banker will look at the stamp and say 'nothing doing;' I want something regular that I can sell over the telephone and these bonds are special, and are not good delivery; they are not salable without explanation." And so on all along down the line. The banker will finally say "I wouldn't loan you 20 cents on these bonds because if I had to buy them in to collect the loan I would probably be stuck, because if I have to peddle them around with explanations to everybody each investor will probably say 'I don't want anything special like that because I will then have the same trouble selling it as you are now having. I want something that is regular and is well known; something that is good delivery and that is traded in every day.'" Our people explained all this to the utility commission and told them that stamping bonds in this way will probably mean a loss of from 10 to 15 points to the company, and that the consumers will have to pay it, and that in the public interest they ought to reconsider their decision. The matter is still hung up and the Lord only knows when we will get action.

The point I want to make is, what good does this all do? Whom does it benefit? In fixing the value of any property, either for rate making or in condemnation, the universal rules of all commissions and the court decisions are, without exception, to wholly ignore the security issues; their findings being based solely upon the fair value of the property. Now, therefore, it is very clear, from a practical standpoint, that neither bond nor stock issues affect the rates of a properly regulated public utility. The stock certificates outstanding are merely evidences of ownership. It doesn't make any difference whether you issue printed stock certificates expressed in dollars, or if you distribute to your stockholders so many brass checks or blue chips. The only essential is that the stockholder should have something evidencing his proportional interest in the property, and that it should be readily transferable and salable. From these illustrations you will readily realize that the utility companies are already having their share of troubles where the State commissions regulate the securities. Now, after we get through with the State commission regulation of security issues because the States that create the utility corporations will still have the right to regulate the security issues of their own creatures and will continue to do it unless there is a Federal incorporation law we will then have to go to the Federal Government for further regulation of security issues if this bill is passed. Investors may be willing to pay a high price for certain securities to-day; 30 days from now market and business conditions generally may be so changed that you can't sell the securities at any price. These illustrations will bring to your mind what it seems to me are the unnecessary delays, embarrassments and added expenses to date in these matters. In these things we can only judge the future by the past. Can any good purpose be served by accentuating these difficulties by injecting a further regulating body as proposed in this bill? Is it not in the interest of the public to limit this thing somewhere?

I think a great deal of harm has been done to the credit of corporations, and in that way to business generally, by the great vehemence with which some governmental bodies have insisted that all stock be paid for at par. I believe that all advanced thinkers who have thoroughly studied this subject fully agree with me as to this. A $100 share of stock may have been paid for at par a few years ago, and now not be worth 10 cents. In the same way stocks in business corporations and also in public corporations—before the present limitations as to their earnings through commission regulation—may have been issued for 10 cents on the dollar 10 or 15 years ago and may now be worth more than par. Why is there something sacred about having every share of stock marked $100, and paid for at the rate of $100 cash per share, and in the same breath sell bonds as low as 65 or 70 cents on the dollar? This is putting the water, if there is any water, in the wrong end. The way to keep a company in good credit, and enable it to get money cheap and plenty of it, is to allow the greatest freedom in the issuance of common stocks so as to facilitate getting some equity money in the property, first, to serve as a margin for the safety of the preferred stock that is issued ahead of the common stock and, second, so that both issues of stock—preferred and common—will make, in the aggregate, a very substantial equity or margin for the protection of the bonds. This is the

plan to follow if we want to keep down the amount of bonds and preferred stock issued, and to get good prices for such issues of bonds and preferred stocks, the returns on both of which should be regarded as fixed charges and the principal of both should be redeemable at some reasonable fixed price. The old idea of building railroads or water powers wholly from the proceeds of bonds is absolutely wrong as a matter of financial economics and should be discouraged. The best way to discourage such old style finance for public service corporations is by limiting, through the present commission regulation, the amount of earnings which a company can make upon its actual investment regardless of the aggregate amount of the outstanding securities, and regardless of how the earnings are distributed as between the several classes of securities. This plan is being largely followed now and will, I am sure, soon become universal as to public service corporations, at least. This plan will force the public utility corporations to give far more study than has heretofore been done to the question of paramount importance, that is, the question of credit or how to get money for this business at the lowest possible cost; and based upon practical experience I know that the inevitable conclusion must be that the only way to do this is to put some equity behind the preferred stock and still more equity behind the issue of bonds—the greater the security the lower the yield—and allow the people who are issuing the securities the greatest freedom in the issuance of common stock.

New York has recently passed a law authorizing the issuance of common stock without par value. The State of Virginia has recently passed a law authorizing the issuance of any amount of stock for the acquisition of property, no matter what the value may be, provided only that a majority of the directors who vote for the issuance of such stock shall sign and file, as a public record, with the Corporation Commission of Virginia, a sworn statement showing what they consider the actual cash value of such property to be at the time the stock was issued for it. The issued stock may be $1,000,000; the value of the property may be $100. There is no further liability to anybody in connection with the matter if the directors file, as a matter of public record, a truthful statement as to what they consider the value of the property to be at the time. Virginia corporations issuing stock under this law have, so far as I have observed their practices, not set up the par value of any such stock as a liability on their balance sheet, but merely show on the liability side the actual capital which is put in the business just as the actual capital in the business is shown on the liability side of the balance sheet of a partnership. This is honest and fair and gives all the information needed, and doesn't mislead anybody, and it is immaterial whether the stockholders have their interest in the property represented by stock certificates aggregating a billion dollars or a hundred thousand dollars or one thousand brass checks. The same thing applies in the case of the New York corporation incorporated under the non par value law. That interests nobody except the stockholders themselves.

I believe that the issuance of common stock without par value is bound to become universal. Bonds and preferred stock must, of course, have some par value because they are prior charges against the property, the accrued interest or accrued dividends must be paid before the common stockholders receive dividends, and in liquidation

the principal of both must be paid in full before the common stockholders can get anything. I know that the aggregate par value of the securities issued by any company no longer misleads anyone who studies or understands the subject at all, and I know that the amount of securities issued do not affect the rates to the people, and I know that sticking to the par value fetich sometimes does force either a receivership or the sale of bonds at ridiculously low prices, which sometimes results later in a receivership. I know that this plan forces water into the wrong end of the financial structure and greatly affects the ultimate credit of the company and therefore retards development. I know from experience that the only time to get cheap money is when you can, and I know it is impossible to do this because of inevitable delays, if you must wait for the commissions who regulate to act upon your security issues. I am certain that the carrying out of this plan will greatly hinder and delay the financing of new enterprises in the West. I don't see how any good can come to the consumer, nor to the public generally, by carrying out this plan and I very much hope that the clause in this bill regulating security issues will be stricken out.

If anyone is afraid that courts and commissions will some time reverse the present policy and will, at some future date, in rate regulation and condemnation cases, take into consideration the par value of outstanding securities, then why not kill this possibility now and for all time by putting into any lease or grant of Government land for power purposes a condition that the grantee or lessee does, in any rate regulation or condemnation case, forever waive the right to ask that the par value of the securities shall be considered. This is already the law and universal practice and will not in any way affect the salability of the securities, and it seems to me ought to accomplish the same purpose as is contemplated in the regulation of security issues, but without any of the embarrassing and expensive delays which must necessarily go with the regulation of security issues by commissions, especially if there are to be two—and possibly conflicting—regulating bodies.

Senator STERLING. Do I understand you to say that will hinder the financing of new enterprises—the surrounding of the security issues with restrictions?

Mr. MITCHELL. Yes; I do not think it serves any good purpose; I commend to all of you the reading of the report of the Railroad Securities Commission to President Taft, dated November 1, 1911, and of which commission President Arthur T. Hadley was chairman, and Hon. Walter L. Fisher was a member.

My experience has been that the three greatest obstacles to water-power developments, especially for other than extensions of the business of existing companies, are--

(1) The present unworkable laws, where Government land is involved;

(2) The difficulty in securing capital, which difficulty, with wholly new enterprises is greatly increased with regulation, especially of security issues; and

(3) Lack of market.

Your committee is now trying to make the laws workable. After this has been done the next question of vital importance is market for the power, and it is only after these two difficulties have been

correctly solved that we reach the last, and usually the greatest, difficulty, that of securing the money; and it is to this, and to some inherent fundamentals regarding power economics, that I will endeavor to confine my remarks.

I have never known of so great a change, and in fact almost universal about face, in financial practice as has occurred in public utility financing by the best investment houses during the past eight or nine years. This change has been particularly marked during the past two or three years, and has been influenced to a large extent by the modern methods of public utility regulation. This change has to some extent curtailed the security business of some and increased that of others. Undoubtedly the regulation of security issues by commissions has had a deterent effect upon the financing of entirely new enterprises. There are some operators, particularly of the old school, who say that there is nothing left in the utility business; that it no longer offers a profitable field for pioneering with wholly new enterprises. They say that if a pioneer makes a profit commensurate with his risk the public utility commissions take it away from him; if he makes no profit, or a loss, everybody says, "I told you so." On the other hand, there are others who are still optimists, and I am in that class, who believe that if the companies will put all their cards on the table face up and be frank and open in every respect with the public and with the legislators, a square deal will be given and that the investors who devote their money to the service of the people will, under regulation have their investments protected by law, and will certainly be allowed to earn enough on their money to induce the investors to continue to furnish money for the service of the public.

One thing, however, is certain. In the public-utility business shoestring methods of finance and fancy profits, which were usually promised but seldom realized, are absolutely a thing of the past. Under regulation, where profits are limited, the days of little companies and long chances are gone, because with such a close limit of profits no one can afford to pioneer in a way which exposes him to large losses, as there is now left no way to average up a large loss by occasionally making a large profit. The only way that I know to make money in the public-utility business to-day is by following the large volume of business, low cost of operation, low cost of money, low rates to the consumers, and small margin of profit idea. Of course, the laws of finance and of economics have always been the same as they now are, except as affected by very recent changes due to public regulation, but strange to say, it has only been within the last three or four years that the advantage to be gained by the investor and the consumer alike, by following the modern plan of big volume and small margin, which I have just stated, has become at all well understood. Under the old plan, a water-power pioneer did not balk at losing 40 or 50 per cent on one risky hydroelectric enterprise—and there have been many such losses—provided he could make a quick profit of 15 or perhaps 20 per cent on a number of such enterprises, but now that it is impossible to make a return of more than 8 or 10 per cent in any enterprise, it has become absolutely essential to proceed with the greatest circumspection and care to avoid making losses on any of them. This has forced the larger and more successful banking houses to devote a great deal of time and study to financial

and operating economics, as applied to the utility business. Inasmuch as the object of this hearing, when boiled down to a finality, can only be obtained by inducing the masses of our people, as the ultimate investors, to devote their money to the public service on a basis most advantageous in the long run for the interests of all the people, it may be well for me to state the essentials necessary to best accomplish this purpose. These essentials, in the order of their importance, are—

(1) Safety of principal.
(2) Certainty and consecutiveness of yield.
(3) Marketability.
(4) Amount of yield.
(5) Possibility of enhancement in market value.

I do not see how it is possible for any man who has studied the entire subject thoroughly and who, from practical experience, is conversant with depreciation of physical property, and especially one who is informed as to the rapid changes in values of physical property, due to improvements in the art, obsolescence, etc., to persuade himself that this bill is drawn in a way which will safeguard him beyond all possibility against the loss of a very material part of the principal of his investment, no matter how wisely such principal may be spent, nor how diligent nor with what intelligence the orders of the regulatory bodies may be carried out in the matter of the construction and practical operation of the property. I am referring now, particularly, to the so-called recapture clause, section 5 of this bill. The possible injustice, and—if the law is made mandatory—the probable certainty of confiscation in the interest of the Government, or some subsequent lessee, of a substantial portion of the initial investor's principal in these properties, has been pointed out at length by others. I will only refer to it now. I am frank to say that the possible unjust effect of this recapture provision is the most disturbing feature of the entire bill. I do not believe there is a single individual in the Interior Department, nor in the Halls of Congress, who wishes to induce anybody to devote his savings to the service of the public with the knowledge that such investor is not going to receive a fair deal; that such investor is not going to be as fully protected against having his property taken away from him by the United States Government without full compensation, as he is now protected by law against having his property confiscated, or otherwise taken away from him, by the State or by individuals. I am positive in my own mind that if we all agree as to the facts in this instance, we will all agree as to conclusions. I am fully convinced that the same reasoning applies to some of the other clauses concerning which there has been much discussion at this hearing.

I have heard it stated that the investment bankers are too particular about the provisions of this bill, and that the Federal Government will never be a party to, nor will it allow, the confiscation of the hard-earned dollars of any of our people who invest their money, at the invitation of the Government, under the terms of this bill, that we ought to trust to the fair dealing of the Government officials who will have the taking over of this property at the end of 50 years. I wish to call attention to the fact that this particular provision is not discretionary with the Government officials; it is mandatory. It has been brought out at this hearing that a very important irrigation

project, involving something like 200,000 acres on the Green River in Utah, was killed, because, under the present law, the irrigation project could not arrange with power developers to spend something over $2,000,000 for the building of an irrigation dam to be used, first and principally, for the irrigation project, because under the law no permanent right could be given to the power developers for the use of the waste waters not needed for the irrigation project. I am sure the Interior Department realized the importance of the great public benefit to grow out of this project, but in its interpretation of the law it had no discretion and it told the irrigation project people that as to the power they could only get a revocable permit, which was, of course, not satisfactory to investors. I am merely mentioning this to illustrate the fact that public officials must carry out the law as it is enacted by Congress. The execution of laws is not discretionary; it is mandatory. This emphasizes the necessity of making the law clear and fair at the outset. Even were this not true, the investor must be concerned about these matters if he expects to own any securities where Government land is in any way involved. A great many investors depend solely upon their investments for their every-day actual necessities. In some cases the loss of the principal means that certain investors must become public charges. The banker who persuades people to buy these securities occupies a most responsible position.

I know from experience that the best bankers feel that once a security has been sold the seller is, and he should consider himself thereafter, a trustee, charged with the duty of protecting that investment against loss, as far as it is practicable to carry out such policy. I don't mean by this that investment bankers do, or should, as a rule, guarantee securities in any way, but they do feel responsible for their integrity as long as they are outstanding, and feel that during all this time they are charged with the duty of carefully watching the particular property and helping in a cooperative way their investing clients in protecting themselves. I happen to know that this, in many cases, weighs heavily on investment bankers. I also know that many of them spend a great deal of their own money and time in protecting their clients in such matters.

In the banking business character, good will, reputation, and confidence are the all-deciding factors between success and failure, and the only thing that succeeds in these matters is success itself. Therefore the interest of the successful banker is not, and should not be, merely to sell a security at a small margin of profit and forget the transaction, but to sell something that makes good for all the time it is outstanding and which, if it changes at all, gets better.

Aside from the objections which I am certain bankers will have to buying or selling any securities issued under the terms of this recapture clause, I wish to call your attention to the fact that a very large amount of the investment capital to-day is furnished by insurance companies, mutual savings banks, administrators of estates and trustees for estates and annuities accruing to other people. I believe it is hardly necessary to ask if any Senator here, acting in a fiduciary capacity, would for one moment think of investing trust funds in anything where a part of his investment can be taken away from the beneficiary of the trust without compensation. All through this bill many things are left to the discretion of some Government official. I

realize that as to some things there may be some necessity for discretionary powers, but I hope that the bill will be so changed as to limit discretionary powers to matters of engineering details or to administration matters; that as to all essential matters of title or of business the law be made as plain and specific as it is possible to write it. It is all well enough to say that our people can trust our officials to do the right thing. I believe, as a general rule, this is true, but these bonds run for 40 or 50 years with stocks for all time and the investor will be satisfied with nothing short of legal certainty written into the law. We are now talking about property which is hard earned and vital to every investor, and the smaller the investor, the more vitally necessary it is to avoid loss. I know from experience that when investors put their money in anything they insist upon knowing that they have the lawful right to keep the property or to get full and fair compensation under the law if it is taken away from them by any Governmental or other agency, and without any fear that a plea will be made that they have contracted themselves, under the terms of this bill, out of such constitutional right.

My experience has been that investors are not satisfied to buy property which they can hold only through the grace or acquiescence of somebody else. They insist that they must have a defendable lawful right to it.

I wish to call your attention to the fact that investors in water-power securities, where Government land is involved, are at this time particularly sensitive as to the question of tenure. I know from experience that thousands of investors scattered over practically every State in this Union, and also in a great many foreign countries, have invested their money in water powers in connection with which Government land is involved, and that at the time the money was devoted by them to the service of the public they little dreamed that there were any flaws in their land titles, or that this great United States Government would come in later and arbitrarily revoke all rights to occupy such Government land so long as the companies continue to properly operate their business to the satisfaction of the consuming public. To their sorrow, they now know that this hope and expectation was ill founded. Thousands of investors know that numerous suits are pending wherein the Federal Government is proceeding to eject these companies. These revocations and these ejectment suits are matters of common knowledge, and I am sorry to say have resulted in wide-spread skepticism and fear where Government land is involved. This fear has greatly accentuated the difficulties which face those of us in the investment banking business in securing further capital for the development of western enterprises. The effect of these revocations and ejectment suits has been to create an impression in the minds of investors that the Federal Government is unfriendly to power developments, and if further capital is to be secured at reasonable cost for the development of powers affected by Government land it is, in my opinion, necessary that this bill be written in a spirit of fairness and mental hospitality toward power developments calculated to invite investment that it be made so clear that even the most technical lawyer must advise any investor that the integrity of his investment has the fullest protection and the good faith of the United States Government back of it, and that the rights of the power developer are so clearly safeguarded that there can be

no question about the investor being able to defend himself in court against anything which may at the time seem to be confiscatory.

Senators, in my opinion, the protection of the integrity of the investment is the most important thing in the whole bill, as it is of the most vital importance to the consumers of the power and to all the people of the States in which these power sites are located. If the investor can not be persuaded that he is safe under this bill, and his fears are not allayed, he will put his money into some one of the many thousands of other lines of business which are constantly reaching out for capital. This will leave the promoters and owners of irrigation, mining, manufacturing, and other projects, and the people generally in the States affected, without adequate power service because they can not obtain it unless they can convince the men with money that the enterprise is safe and profitable.

I beg of you that this phase of the situation be given your most careful consideration.

It is preferred by the Government that the powers be developed. I assure you that this can be accomplished only if legal rights under the terms of the law are made clear and secure—as secure and as clear and as fair as any other investments on privately owned lands. If that is not done other investments will be preferred, much to the detriment of Government power sites.

Power enterprises, to be successful, should be established upon a stable and permanent basis, free from every element of uncertainty that it is in the power of the Government to remove. These power enterprises have come to stay, and are as much of a vital public necessity as are the domestic water systems in our great cities. These companies will never require less capital, but will constantly, year by year, for all time, require in an ever increasing ratio, more capital. This necessity for a continuous and constantly increasing expenditure will be none the less urgent toward the end of a 50-year period, or any other term; this constant necessity for an increasing amount of cash will continue to the end of time. For this reason an amortization of the capital is a financial impossibility, particularly for fixed term tenures, without imposing rate burdens on the consumers which in most cases they can not possibly stand. Capital expenditures, if honest, must be commensurate with the facilities for serving the people. The people demand facilities commensurate with the growth of the communities, and even in a community where there is no growth the people constantly demand better and more facilities, because they are progressive in their ideas of modern convenience and comforts, and are not satisfied with the continuation of old methods. They and you know that to stand still and not progress is, relatively, to fall behind—to go backwards.

No power company, or other public utility, can, over a long period, take care of its cash requirements, for obsolescence and for an average growth of 12 per cent or more, out of its net earnings, and at the same time pay one cent of interest or dividends. Many of them can not grow 6 per cent per year and do it. This means that if the company's transmission lines and power supply grow to serve the people properly the company must be constantly in the market seeking other peoples' money to be expended for capital account, and the greater the growth the larger the money-getting problem becomes, and frequently the greater the company's embarrassment. It is easy to get these

funds if the investors are sure that the principal will be safe and that the dividend and interest payments will be regularly and consecutively made without interruption. Why do the small investors put their funds in postal and private savings banks and invest in State, municipal, and United States Government bonds? It certainly is not because the yield is large, but for the sole reason that the principal is safe and the interest payments are sure and consecutive. The bulk of the permanent investment capital furnished for public utilities to-day is not furnished by the very rich, but by the relatively poor and middle-class people. If tempted by ultimate or possible large profits, the very rich can afford to take long chances on losing some of the principal and of having some of their dividends stopped for long periods, because they will still have income enough to live in comfort. Not so, however, with the small and poorer investors, who in the end supply the bulk of the capital for public utility enterprises. A very large number of these small investors have but small margin of income over living expenses, and can not afford to buy securities where there is a possibility of having a break in the consecutiveness of their interest payments or dividends, because they have no other means of support. It is vastly more important to them to receive their income regularly, and without diminution, even though the fixed amount received is small, than to run the risk of receiving no income whatever for a number of years in the hope of some time making a high rate of return.

The importance of marketability of securities is rarely appreciated by those who are not constantly dealing in them, or loaning money on them, or who have not, in times of stress, tried to sell them at a fair, or at least some, price and failed.

For purely economic reasons, both from the financial and the operating standpoint, the day of little plants and distributing systems and of little companies in the public-utility business has gone forever. The issue of securities on small plants is necessarily very limited in amount, and the ownership of the securities is consequently confined to but few people. This makes a narrow and restricted market, with the effect that with only two or three people, in some cases, knowing about the property, the seller is at a great disadvantage in case he is compelled to liquidate. For these reasons bankers and other lenders do not, as a rule, consider such security good collateral for loans. Administrators and trustees for estates, and investors who are dependent upon their income for a living usually can not afford to invest in such securities because small companies are so easily put out of business or crippled by any slight adversity, which would scarcely be noticed by the large company, and therefore there can be no reasonable certainty as to dividends being paid regularly, if at all, and in case of sickness, business adversity, or other reasons for selling the securities of a little company the investors know that such securities can not be converted quickly, if at all, into cash upon any reasonable basis. I know from experience that investors, as a rule, do not want to buy the securities of small companies on any yield basis which the consumer can afford to pay through service charges. These little companies are usually owned by a few stockholders who, for a time, could get along fairly well under the old-style plan of charging high rates and avoiding extensions to plant and giving poor service.

Now that the people, under commission regulation, are insisting upon better service and more service at lower rates these few stockholders find that they can not sell their securities to the public on any reasonable basis. Their plants are too small to be economical and the profits of the business, in many cases, are not sufficient to provide the cash requirements for growth, even if all interest and dividend payments are stopped. This has resulted in a realization on the part of the owners of the small properties that times have changed; that it is no longer possible to get any income out of such business; that the people will not put up with the kind and quantity of service they have heretofore had, and that the little company must either sell out or consolidate with some larger company, or group of companies, which can readily get other peoples' money for extensions or, in the alternative, face municipal competition or drastic action by the commission in an effort to secure good service at reasonable rates for the people. These and the other economic facts I have mentioned account for the present tendency toward a consolidation of all the plants of many different towns, villages, and rural communities into one company, which eventually supplies the entire territory with transmission lines fed from one or more large and up to date power stations. This is also in line with the words of wisdom which Mr. Armour gave me more than 20 years ago when he said "Never buy anything that you can't sell," and "If you get a peanut stand in trade sell it immediately, and if you can't sell it make it the peanut division of a department store in exchange for department store stock and may be you can sell the stock." The corollary of this is the large company in which more people are interested as stockholders or bondholders, or know about its business, and consequently the more people there are to trade in the securities which in turn means higher selling prices of the securities, because they are more liquid and they are, in practice, regularly bought and sold by telephone and are, therefore, good collateral at any bank. Whatever yield is earned on securities is paid by the consumer. The less the risk, the greater the marketability and the less yield required to attract money and, therefore, the less the burdens which the consumers have to bear. I am mentioning these facts to emphasize the importance to the consumer of being served by the largest possible companies whose business is given the greatest possible stability by reason of the large area served and the large volume of business handled. Absolute control of the rates and conditions of service by the regulatory commissions insures all these benefits of large companies to the consumer, yet at the same time protects him against high rates and discriminatory or unfair treatment or bad service.

To secure investment money, the return must be reasonable. "Reasonable," in this case, means the return which will induce the man with the money to invest in the particular enterprise. What this return must be in any particular case necessarily varies according to the investors' idea of the risk in such case. The infallible rule is, the greater the risk the greater must be the yield, and therefore the greater the burden which the consumer must bear. I say the consumer must bear this burden because it is only through payments by the consumer for service that the investor can get the yield necessary to bring forth the money. It is the business of the regulatory utility commissioners to see to it that substantially all the increases

in profits, due to the growth in volume of business and the economies which always go with such growth, go to the consumers through rate reductions or extensions of service to develop and build up surrounding territory. I have yet to learn of a single case where regulatory commissions have failed to do their duty in this respect. On the other hand, any unfair treatment of the utility company by the Governmental agencies increases the hazards of the business and results necessarily in an increase in the yield which the man with money will insist upon receiving if further funds are to be provided. This means one of three things: (1) the rates will be raised; (2) reductions in rates which would otherwise be made will be deferred, or (3) no more money will be forthcoming to take care of the growth of the community. In any event it is the consumers who suffer.

If prompt, complete, and economical service is to be secured for the consumers, it is just as important that the men who devoted their money to the public service in these enterprises be treated fairly, and even liberally, as it is for the consumers to treat the servants in their households fairly and liberally, if effective service is expected. Human nature is such that the best work can not be obtained from ordinary time servers who are not spurred on by an incentive for exceptional achievement. I therefore think that where the operating companies show exceptional zeal and ability in extending the power systems, improving the service and lowering the rates, they should be allowed to earn a little extra compensation. If this policy should be adopted by commissions generally, it might offer a strong probability of enhancement in prices of utility securities and thus add to them an increased or prospective value, to be realized only provided the company earns it through good conduct and efficiency. I believe there are many cases in which the consumer will be repaid many fold by holding out an inducement of this kind as an incentive for exceptional personal effort and ability in public service.

In this connection it may be interesting to quote from the testimony of Mr. Pinchot before the National Waterways Commission in November, 1911, as follows:

I should like to be understood here as asserting, with a good deal of vigor, that I believe the investors who go into water-power development should be given a much more generous return for their investment than men who go into a less hazardous business, for the risks of a business of that kind are certainly very large. The public needs the development of water power.

Mr. Walter L. Fisher, at the same hearing, stated:

But if we retain the plan of a Government appraisal of readjustment there should be a provision protecting an interest return upon the fair value of the property, with the right of the grantee to go into court to enforce this right. I do not believe, however, that merely an interest return on money invested in any of these enterprises will encourage investment. The investor should have a return on his money on the interest basis if it is there. The public can not guarantee a return; it must be made out of the property. The development of the property may have been unwise in its conception, or it may have been unwisely executed, and that may be the cause of failure, but if the revenue is there, there ought to be an investment return assured out of the net receipts. But we can not afford to stop there, because if we fix an arbitrary limit of 5, 6, or 8 per cent, whatever it may be, this will destroy all incentive for future development and extension and will affect adversely the economy and efficiency in the management of a large water-power plant. I see no reason why we can not afford to provide an added incentive. * * * I conceive it to be in the public interest that the return which is allowed to be made on enterprises of this character shall not be whittled down too closely. I think that these investments should be attractive to investors and they should get a little more than we are often disposed to think is absolutely fair, so that

there will be a constant tendency and desire on the part of capital to go into these enterprises, because perhaps they make a little more than in some other investment where there is only the same amount of risk. * * * I do not believe in the theory of taxation of public utility corporations when you can get effective regulation. I think it is an indirect tax, which does not conform to principles of correct taxation, because it does not follow the canons. It does not fall on those people best able to bear it; it is not imposed according to principles of correct taxation.

I think we will all agree that the Federal Government should not treat in a cheese-paring and niggardly way the people of this country who devote their money to the public use and subject themselves to the absolute and complete control of governmental authority as to each and every most minute detail of their business, even giving to the Government, through the utilitiy commissions, the right to regulate the compensation of such public service. There is no chance for collective bargaining, as practiced between organized labor and capital. If we all agree that the Government should deal fairly, and even liberally, as to the rate of return to investors, who accept the Government's invitation to devote their savings to the public use, then I say to you, Senators, that while the matter of yield is important, based upon my practical experience of many years, it is of far greater importance, if capital is to be secured upon reasonable terms, or at all, that the safety of principal be made the first requisite and much better safeguarded from confiscation than is done by the present wording of this bill. I refer again particularly to the recapture clause already mentioned. If capital is to be attracted, the way to do most effective work is to safeguard that capital against unjust treatment, against fear-creating uncertainties and especially against confiscation.

I know that investors do, and will continue to, fear that every time it is necessary to come to Washington to get the consent of some appointive official for doing anything mentioned in this bill that such consent may be withheld, or given only upon conditions. There is a fear that the power to impose new and perhaps unjust terms affecting vital business matters as a condition precedent to the giving of any consent necessary under the terms of this bill will be used as a means of forcing a new trade; of changing the rules of the game, so to speak; of changing them after the man has already put his money in a dam in some canyon and is unable to get it out. In other words, investors want to know what the rules of the game are before they put their money in, and they do not want to put themselves in such position that after their money is once in they can be coerced into accepting changes to their detriment and in a way to leave them stuck in the enterprise as unwilling investors.

It is well known that more than $400,000,000 a year is now being expended to take care of the ordinary growth in the public-utility business, and that this rate of expenditure is increasing by leaps and bounds. There is not the slightest doubt that within the next seven or eight years the expenditures for such improvements and extensions will amount to at least $800,000,000, and, in fact, may amount to $1,500,000,000 per year. In my opinion, if this bill is passed as drawn it is quite likely that but little, if any, money will be obtained for power developments where any public land is involved, and I hazard the statement that if money is obtained from the public at all for such purposes it will be very difficult to obtain, and will certainly cost not less than 2 per cent per annum more than would be the case if investors are adequately protected. There are to-day

many utility properties representing cash investments in excess of $40,000,000, and within the next 20 years I certainly expect to see dozens of utilities with properties which have cost in cash in excess of $100,000,000. A minimum of 2 per cent extra cost of money thrown on the consumer, as I believe will necessarily be done if this bill is passed as written, will mean that in any 50-year period such additional, and in my opinion wholly unnecessary, interest charge will amount to one and four-tenths times the principal. To illustrate my point, under this bill, with the uncertainties created by its terms, if a $100,000,000 power property should use one one-hundredth part of one acre of public land the extra interest cost which the consumers must bear, merely because the company uses this infinitesimal piece of Government land, and thereby subjects its entire property to the onerous conditions of this bill, will in my opinion equal at least 2 per cent per annum, or a total of $100,000,000 in every 35-year period. Senators, do you wish to put such a burden on any local community? Is it wise, in the public interest, to do this? Is it fair to the people of the States in which the Government land is located? Is the advantage of having any $100,000,000 far West property controlled and regulated by any single appointive officer in Washington, no matter how fair and how able he may be, and then of later recapturing such property under the possibly confiscatory terms now written in section 5 of this bill, worth this $100,000,000 extra cost to the particular consuming public affected? Would not these consumers and the other people in the State prefer to save this $100,000,000 extra cost of capital and get the benefit through lower rates? Senators, in discussing this matter of economics of governmental policy you are really not dealing with the investor, but with the consuming public, and the people in the States where the public lands are located. It is clear that if investors don't like the bill they will not invest their money under it. They can not be forced to do so by any possible legislation, and it is absolutely clear to my mind that it is not the investor but the hundreds of thousands of consumers and the people in the States affected who are alone interested in this matter. It is as clear as daylight that they will be greatly injured if this bill is passed as written, and it is not at all clear who, if anybody, will be benefited by its passage as written.

Mr. Chairman and Senators, I thank you for your courtesy and great patience in listening to me.

The CHAIRMAN. Without objection, there will be inserted in the record the statement which Secretary of the Interior Lane has sent to each member of the committee, entitled "Water power."

(The paper referred to is as follows:)

WATER POWER.

[FRANKLIN K. LANE, Secretary of the Interior.]

Should the Government allow its dam and reservoir sites and other lands valuable for power development to pass from its hands forever?

(1) It has been the policy of Congress from the inception of power development in the United States only to grant permission to use such lands and not to sell or give away the lands in perpetuity. Acts

of Congress of May 18, 1896 (29 Stat., 120); February 15, 1901 (31 Stat., 790); February 7, 1905 (33 Stat., 702); May 1, 1906 (34 Stat., 163), and March 4, 1911 (36 Stat., 1253).

(2) The general law applicable to the use of public lands for the development of electrical power, the act of February 15, 1901, authorizes the grant only of a permission to use public lands and reservations for this purpose, expressly providing that any such permission may be revoked by the Secretary of the Interior, or his successor, in his discretion, and shall not be held to confer any right or easement, or interest in, to, or over any public land or reservation. The general law now in effect relative to granting of rights of way for transmission lines, the act of March 4, 1911, only permits the approval of such rights of way for periods not exceeding 50 years.

(3) The future of water power is still unknown. It promises to be an invaluable resource; (*a*) because it replaces itself, while coal and oil do not; (*b*) because it can be transported at slight expense and for long distances; (*c*) because the development of numerous other western resources, low-grade ores, irrigation of arid lands by pumping, and the establishment of manufacturing enterprises are dependent upon cheap and abundant electrical power.

(4) To at this time grant such lands in perpetuity to private corporations or individuals is to divest the Federal Government, as well as the several States, of a large measure of the control which it might otherwise exercise over this resource by law or regulation and would place beyond its power the opportunity of providing by law such different method of use or disposition as the future may show to be best adapted to the public interests.

WHAT HAVE THE STATES DONE WITH THEIR POWER SITES?

With possibly few exceptions, the valuable power sites on lands not owned by the Federal Government have passed into private ownership in perpetuity. They can not be recovered except at a prohibitive expense, nor can control be exercised thereover in any manner, except it be by regulation of transmission and delivery as a public utility. Out of 7,000,000 horsepower developed in the United States in 1913, twenty companies or groups of interests controlled 2,710,886 developed horsepower and 3,556,500 undeveloped horsepower, or a total of 6,267,386 horsepower. According to a table compiled by the Forest Service, out of a total of 1,135,400 developed horsepower in the States of California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, and Washington, 1,023,700 horsepower is owned by large corporations, while but 111,700 horsepower is owned by small developers. In the State of California, 92 per cent of the developed power is owned by the large corporations and but 8 per cent by small developers. In Oregon, 90 per cent is owned by large companies and 10 per cent by the small developers. In the State of California, one corporation owns 27 per cent of the total developed horsepower in the State and two groups own 57 per cent of the total development.

WHAT HAS THE FEDERAL GOVERNMENT DONE WITH ITS SITES?

As stated, it has never been the policy of Congress to dispose of these sites in perpetuity, the laws providing simply for the issuance of limited or revocable permits. Therefore, while some valuable sites have been acquired by private owners through the filing of scrip or entry of the lands under some one of the public land laws not intended to apply to the development of such a resource, the major portion of lands valuable for this development remains in Federal ownership. A conservative estimate places the total available horsepower at 35,000,000, of which not exceeding 7,000,000 have been developed. Of the total undeveloped horsepower, 28,000,000, about 74 per cent, is in what are known as the public-land States, and 42 per cent of the total is within Government forest reserves. It is thus apparent that the extent and value of this undeveloped resource is large enough to require most careful consideration and disposition.

HOW DO OTHER GOVERNMENTS DEAL WITH POWER SITES?

The laws of the Dominion of Canada authorize the issuance of licenses for 21 years, renewable for three further terms of like extent, at a fixed fee, payable annually, and provides that upon the termination of a license the works may be taken over by the Government upon payment of the value of the actual and tangible works and of any lands held in fee in connection therewith. It is expressly provided that the value of the rights and privileges granted or the revenues, profits, or dividends being, or likely to be, derived therefrom shall not be taken into consideration.

The Province of Ontario authorizes a lease of water-power privileges for periods not exceeding 20 years, with the right of renewal for two further and successive terms of 10 years each, upon the rental stated in the lease and upon such other terms and conditions as the minister may prescribe. Upon the termination of the lease the privileges, together with all dams and other structures or works made or erected by the lessee in connection therewith, revert to and become the property of the Crown, subject, however, to the right of the lessee to remove machinery, failing in which removal, it shall become the property of the Crown, also subject to payment of compensation to the lessee of such sums as the minister may deem proper for buildings or structures of a permanent character and necessary or useful for the development or utilization of the water privilege.

In New Brunswick the lieutenant governor in council is authorized by law to lease or sell rights and privileges for water-power development upon such terms and conditions as to development and utilization as he may prescribe.

In the Provinces of Manitoba, Saskatchewan, Alberta, Yukon, and Northwest Territory the governor in council is authorized to make regulations for the diversion, taking, or use of water for power purposes, and for the construction of power development works on public lands. He is also authorized to fix the fees, charges, rents, royalties, or dues to be paid, and the rates to be charged.

In Queensland the law authorizes water-power development under special license, subject to such conditions and provisions as the governor in council shall determine for periods of 10 years.

In France power plants on national lands are developed under concessions for periods not exceeding 50 years, at the expiration of which period the grantee, if concession be not renewed, is required to restore the premises to the conditions previously existing or to deliver the plant to the nation without indemnity, as the nation may elect. The amount of rental to be paid is required to be fixed in the articles of concession.

In Norway the law authorizes the granting of concessions for power development for a minimum of 60 years and a maximum of 80 years. When the concession expires the land, with improvements and works, reverts to the Government. Various payments for the privilege are required, among them being the establishment of a poor fund under public control, the surrender of a certain percentage of produced power to the community, also to the general Government, and in certain specified developments there may be assessed a yearly tax of 1.25 crowns for every horsepower over 500.

REGULATION AND CONTROL OF POWER DEVELOPMENT AND TRANSMISSION IN THE SEVERAL STATES.

The States of Arizona, Wisconsin, Michigan, Missouri, New Mexico, Kansas, Oklahoma, Montana, Idaho, Nevada, California, Oregon, and Washington have provided public-service commissions or bodies vested with more or less authority to regulate and control public-service corporations. The other States containing public lands and reservations do not appear to have provided for such control or regulation, nor has same been provided for the Territory of Alaska. In some of the States named as having public-service commissions, it is represented that the control and supervision is entirely inadequate. Be that as it may, legislation to be enacted should provide for appropriate control and regulation, either by the States or by the Federal Government where the States do not act, where the development is of such a nature and extent as to pass beyond the jurisdiction of a single State. Water-power transmission does not stop at State lines. Power development and long-distance transmission connect widely separated localities and communities. The public interest requires that there be no hiatus. Where State control ceases or does not exist, Federal control is essential to protect the people.

WATER POWER OF THE WEST CAN NOT BE DEVELOPED UNDER THE PRESENT LAW.

It is generally conceded that the water-power resources upon the public domain can not be developed under existing laws, because of the uncertain tenure involved by revocable permits; (*a*) because the engineer and the promoter fear to embark an enterprise under such conditions; (*b*) because the capitalist will not loan money upon such security; (*c*) because the consumers can have no positive assurance that they will be supplied for a fixed and definite period.

It is an established fact that numerous responsible persons who have obtained permits to develop power sites under the existing law have been unable to construct because of the foregoing.

WHAT SHOULD THE NEW LAW BE?

The ideal law is one which will give to the developer and investor an assured tenure for a period long enough to justify his investment and reward his efforts. It must be under conditions known to him in advance, so that his plans may be laid accordingly. It must encourage development without losing sight of the needs of the consumer and the rights of the people.

The gift of a franchise means, generally, the gift of additional profit to the promoter. Its benefit is not passed on to the consumer. There is nothing connected with such a gift which obligates or induces the developer to make low rates to the consumer or which obligates him to deal more favorably with the general public. Municipalities have generally abandoned the practice of giving away franchises. The people expect and demand that valuable rights shall yield something in the way of direct return. A nominal sale charge is equally objectionable. It has the appearance of yielding a return, while in fact it is more trouble than it is worth, and therefore imposes a burden upon the developer while yielding nothing, or substantially nothing, to the people. Such a nominal charge is also worthless as a regulative measure.

WHAT IS THE VALUE OF PUBLIC LANDS VALUABLE FOR RESERVOIR SITES?

Nothing as agricultural lands, because, generally speaking, such lands are in canyons or mountainous regions, valueless for agriculture, of little value for grazing, and of little value for other purposes than the development of electrical power. Five per cent of this value would be negligible and not worth collecting. One dollar and twenty-five cents per acre has been suggested as the agricultural value of public lands, because homesteaders may commute at that figure That does not represent a sale of lands. It is an arbitrary price exacted by law as an evidence of good faith in connection with the submission of final proof on a homestead prior to the expiration of the ordinary homestead period. The present real value of a tract of land for agricultural purposes could only be determined through a method of advertisement and open competitive bidding. The Government does not dispose of other lands or values upon this theory at all. Timber land is disposed of at a price fixed after careful examination and appraisement, the sale price being based on the timber value. Coal land is disposed of on an appraisement based upon the amount of the coal content and a royalty of approximately 2 cents per ton.

The true value of power sites is, then, not the nominal figure of $1.25 per acre, not their value as agricultural lands, timber lands, or coal lands, but their value as dam sites, reservoir site, or for other uses in connection with water-power development, and for this purpose the larger and more valuable sites are worth millions of dollars. In one existing development the corporation valued the lands acquired for its dam, reservoir site, and plant at $26,353,069, as evidenced by bonds and stock. A private owner would ask not less than 5 per cent of the value of such lands as power sites. Should the Government do so? In my opinion, it should not, because that would prevent development or impose an undue burden upon the consumer; nor should the Government give away lands worth

millions of dollars for power sites, because that would be unwise, unbusiness-like, and in derogation of the rights of the general public. Such lands can not be sold because developers, except in rare instances, could not or would not pay the real value of the lands as power or reservoir sites. If they did, they would endeavor to secure return by imposing higher rates upon the consumers, and in that case would doubtless be permitted to impose higher rates by public service commissions, on the ground that it represented return upon actual investments. To give the lands away is therefore not right. To sell them at their real value is impracticable and would injure the consumer.

Why not then secure development under a plan which will be fair to the developer, the investor, the Government, and the consumer, by lease or permit for a definite period on conditions fully known in advance. The word "lease" is hardly properly descriptive of the plan which should be adopted. It is not a lease in the ordinary meaning of that term. It is rather a permission to use; a contract or agreement for the development and use of sites.

THE FIXED PERIOD.

Careful consideration has been given to the question of what period should be covered by such a permit or agreement, and the general consensus of opinion seems to be that 50 years is the proper one, having in mind the rights and interests of all concerned. This, subject to renewal in the event that the Government and State or the municipality does not desire to take over the plant at the expiration of the original permit period, or for good and sufficient reason it be not found advisable to renew the permit to the original permittee.

As already shown, other Governments make such leases or concessions for periods varying from 10 to not exceeding 80 years. The State of Kansas provides that franchises to those developing or furnishing electric light, power, or heat to any city in that State shall not exceed for a longer period of time than 30 years from the date of a grant or extension thereof. The State of Wisconsin authorizes an indeterminate permit and provides for the taking over thereof by a municipality at any time upon due notice and proceedings. The consensus of opinion on the part of those interested in power development seems to favor, however, a fixed and definite permit rather than the right in the Government, State, or municipality to take over the plant at any time during the period of use and development.

It is self-evident, however, that the right should be retained to take over the works upon proper terms and conditions, in order that the same may be taken over and operated by the States or municipalities, and to do this the law and the permit must provide such terms and conditions as will be fair to the permittee, and at the same time not forever preclude the exercise of this right by the State or municipality, because of the impossible amounts required to be paid as a prerequisite to the recapture. It is evident that for the use of the public lands to be granted, no payment should be made to the permittee on that account. It is further evident that for lands acquired by the permittee during the course of the development, payment should be made, but that payment should not include the unearned increment created by the community and not by the power

developer. Nor should it include payment for "good will," franchise values, or intangible elements.

The laws of the State of Illinois provide that any city is authorized to acquire, construct, own, and operate public utilities and to lease the same for periods not exceeding 20 years. They further provide that there may be reserved in any grant the right to take over all or any part of the property used in operation of a public utility at or before the expiration of the grant, upon terms and conditions provided in the grant, or to grant to a third party, at the option of the city, on the same terms.

The laws of Massachusetts authorize the acquisition by cities or towns of municipal electric plants, upon payment therefor, specifically providing that the value in so taking over shall be estimated without "enhancement on account of future earning capacity or good will, or of exclusive privileges derived from rights in the public streets."

The State of Wisconsin, as already stated, authorizes the issuance of an indeterminate permit for electrical power, but provides for the taking over of such plants by municipalities at any time, upon payment of just compensation, to be determined by the public utilities commission, and according to terms and conditions fixed by the commission. Every such public utility is required to sell such property at the value and according to the terms and conditions determined by the commission, subject to court review.

The laws of Arizona, California, Maryland, Nebraska, New Jersey, New York, and Ohio prohibit the capitalization of any franchise or permit beyond the amount actually paid to the State or to a political subdivision thereof as a consideration of the grant of such franchise or right.

None of the laws of the other States or countries, in so far as I have been able to ascertain, authorize or provide for the payment, upon the taking over or recapture of a public utility, on account of good will, franchise value, or other intangible elements. Therefore the provisions of section 5 of the Ferris bill appear to be, in this respect, in full accord with the general practice.

WHAT PRICE OR CONSIDERATION SHOULD BE EXACTED?

As already intimated, a nominal charge of 5 per cent of the agricultural value of the land would be useless and inadequate, and would not justify the trouble and cost of collection. The gift of such a resource would not inure to the benefit of the consumer or of the general public, but to the promoter. Furthermore, the authorities agree that a charge of some kind should be imposed as a regulative measure. The Government could, if it followed the precedent of private owners, charge not less than 5 per cent of the value of the lands for power purposes, but this would be a heavy charge upon the developer, which he, in turn, would endeavor to recover from the consumer.

We should charge nothing at first, during the period while the plant is building and finding a market, except, perhaps, a charge merely sufficient to pay the expenses of administration. This period

of nominal charge might be 5 or 10 years. The charge should then gradually and moderately increase as the years go by, according to a scale fixed in the lease or permit at the outset, and in every instance premium should be put on low rates to the consumer. In other words, the lower the rate to the consumer the lower should be the charge on the part of the Government; also some premium should be placed upon the full development of the power possibilities of a given site. The main object, however, is to secure development for the benefit of the consumer and the regulative charge can be readily fixed upon a sliding scale, which will go up or down, according to the treatment of the consumer by the producer. In this and certain other respects the Ferris bill (H. R. 16673), vests some discretion in the Secretary of the Interior. This is necessary and essential, in order that the measure may be workable and may be adapted to the varying conditions of different developments and localities. An arbitrary and fixed rule would, in many instances, work hardships or injustice and prevent development of sites. An examination of the laws of foreign countries and of the several States which have laws governing the operation of public utilities shows that a large amount of discretion is vested in the public service commissions, governors, or other executive officers charged with the administration of such matters.

DISPOSITION OF MONEY DERIVED FROM POWER PERMITS.

The expenses of administration, which will be smaller than is generally believed, should first be paid. The balance should go to the development of the resources of the States wherein the sites are located, and ultimately, in part, to such States and in part to the General Government. The vital welfare of most of the public-land States where valuable power sites are located is bound up with power development and irrigation. All returns over administrative expenses should therefore go into the reclamation fund for the irrigation of arid lands. Upon return of the money to the Treasury, as provided in the reclamation law, one-half of the sums so returned should go to the State within the boundaries of which the power is generated and developed.

The Ferris water-power bill (H. R. 16675) seems to meet the present situation as nearly as present knowledge and conditions will permit.

It secures development (*a*) by certain and fixed tenure; (*b*) by reasonable charge for the privilege given; (*c*) upon conditions known in advance.

It protects public interests (*a*) by encouraging low rates to the consumer; (*b*) by reasonable regulative charges; (*c*) by contribution to development of other resources; (*d*) by ultimate contributions to the State treasuries.

It looks to the future by providing that at the end of 50-year periods these sites, with their now unknown possibilities and values, may be taken over by the Government to be disposed of to States, municipalities, or individuals, or held under such conditions as the future shall disclose to be wisest and best.

EVILS TO BE GUARDED AGAINST.

In legislation of this kind, among the evils to be guarded against, are—

(1) Monopoly;
(2) High rates to the consumer;
(3) Inability to secure restoration of the public lands to public use.

The first evil is guarded against by the specific provisions of the Ferris bill and by the Sherman law. The second is guarded against by the Ferris bill, and Federal and State regulation. The last is protected against by the provisions of the Ferris bill, which would become effective in each development at the end of 50 years.

CONCLUSION.

The enactment of such legislation for the development of water power is demanded by engineers, developers, and investors; by the general public which would be served by power development; by all the people in the United States, for all would benefit directly or indirectly from the crops produced and industries created by means of power generated and which is now going to waste.

The CHAIRMAN. This closes the public hearing on the water-power bill; and we will adjourn until 10 o'clock, Wednesday, December 30, 1914, when we will be glad to have the views of Senators or Representatives in Congress upon this measure.

(Thereupon at 6.10 o'clock p. m., the committee adjourned until 10 o'clock, Wednesday, December 30, 1914.)

WATER-POWER BILL.

WEDNESDAY, DECEMBER 30, 1914.

UNITED STATES SENATE,
COMMITTEE ON PUBLIC LANDS,
Washington, D. C.

The committee met at 10 o'clock a. m., pursuant to the call of the chairman.

Present: Senators Myers (chairman), Thomas, Robinson, Smoot, Clark, Works, and Sterling.

The CHAIRMAN. All right, Senator Shafroth, you may proceed.

STATEMENT OF HON. JOHN F. SHAFROTH, UNITED STATES SENATOR FROM THE STATE OF COLORADO.

Senator SHAFROTH. Mr. Chairman and gentlemen, I intended to begin with a consideration of the bill I introduced concerning water-power plants, but thinking that some of the members of the committee who are not here now will come in later, I will leave that to the latter part of my talk, and state as succinctly as I can the objections to this bill as I see them.

I believe that any leasing bill for the public domain or resources thereof is a direct attack on the sovereignty of the States containing the same, because it must result in a perpetual ownership of the property in the United States Government. Inasmuch as taxes can not be imposed upon property owned by the Federal Government, it means, to carry it to its ultimate result, the depriving of the States of their means of existence.

I want to call the attention of the committee to a list contained in an article by Mr. W. V. M. Powelson of the number of acres of land in the various Western States now in the ownership of the Government. In Arizona, 92 per cent of the lands within the area of that State are in Government ownership; California, 52.58 per cent; Colorado, 56.67 per cent; Idaho, 83.80 per cent; Montana, 65.80 per cent; Nevada, 87.82 per cent; New Mexico, 62.83 per cent; Oregon, 51 per cent; Utah, 80.18 per cent; Washington, 40 per cent; Wyoming, 68 per cent.

Senator WORKS. Now, Senator, do you know, or is there any way of ascertaining, how much of that is mountainous land that is practically worthless for all purposes, and worth very little to the States for the purposes of taxation?

Senator SHAFROTH. No; I do not know of any way of determining that, but I do know that we can not tell what value there is even in mountainous land. I know that in the State of Colorado the Interior Department has had an estimate made of the value of the public coal lands in our mountains and plains, and they have found that it

alone amounts to over $500,000,000; and to withdraw that land from taxation is to perpetrate an outrage on the State.

Senator WORKS. How much of that coal-bearing land in your State is actually withdrawn from entry?

Senator SHAFROTH. All of it. It is not withdrawn under the old order, but they have practically withdrawn it by putting high valuations upon it, so as to make it impracticable for anybody to take up that land. They have some coal land in my State that has been valued as high as $500 an acre. How can any new coal company compete with another coal company when it has to pay $500 an acre to the Government for the land?

Senator WORKS. I am not intending to antagonize your views about it, but I have often wondered how much land withdrawn from entry that might be leased under a bill of this kind would be taxable by the State?

Senator SHAFROTH. My answer was not personal to you. I know that to some extent, at least, you are greatly in sympathy with the attitude I have taken, but at the same time I want to emphasize my view as much as I can, because, gentlemen, you do not know what you are doing to the Western States when you attempt to foist upon them a leasing system, which means perpetual ownership of the property in the Federal Government, and which means exemption from taxation forever. The State can not tax land which the Government leases. The decisions are plain and clear that the instrumentalities, the means, the agency which the Government employs in any of its enterprises can not be taxed by a State.

Senator CLARK. Senator, what is your view of the South Carolina proposition of the dispensary, that where the State enters into commercial relations with the people its commercial agencies may be subjected to local taxation? I have not read the case, but it has been referred to here.

Senator SHAFROTH. I have not examined that case. I remember the old case in Fourth Wheaton, where the State of Maryland attempted to impose a stamp tax on the instrumentalities that were used by the United States banks, and it was held that it could not be done. There are numerous cases where they have held that it could not be done. There is a line of cases, applicable, for instance, to mines, holding the State can tax the output, but the authorities have placed that solely upon the ground that the Government regards the locator from the time of the discovery as the owner in fee simple of the ore—and not only of the ore but of the ledge itself—in the ground. It started, of course, in the California discoveries, where the people went out there and mined without any law upon the subject, and since that day they have recognized those entries as carrying with them the ownership of the veins upon discovery. The locator can take the ore out when he pleases, or he can leave it in the ground as long as he pleases, and it can become the subject of taxation by the State, because the Government does not claim any title to the same after discovery. But outside of that it seems to me that there is no ground for saying that when the Government undertakes to lease ground it can be the subject of taxation by the State. If these bills pass, it seems to me there ought to be some provision in them giving the State express authority to tax all of the coal lands; and I do not mean all of the coal lands that may be leased, because if you

tie up 99 per cent of them, so that they can not be taken up or will not be leased because of the conditions of the lease being such that an operator can not make a profit, the State ought not to be deprived of the taxes, as it has to maintain government over this 99 per cent that is unleased as well as the 1 per cent which might be leased.

Senator WORKS. Why should you confine that to coal lands?

Senator SHAFROTH. I do not. That is simply an illustration. But there could be no claim whatever in the case of water-power sites that they can be the subject of taxation unless express authority is given by the United States, for the reason that the water-power site is intimately and inseparately connected with the soil itself, the title to which stands in the Government. Most of these power plants are made by tunnels constructed parallel to the stream in the mountains. Nine-tenths of the value and of the cost of a power plant is in the construction of the tunnel. How could you ever levy upon a tunnel without levying upon the lands of the United States? It is absolutely impossible to separate a tunnel in a mountain from the soil itself, which belongs to the United States. It is not even as severable from the soil as a house built upon a homestead claim. Here it is impossible to move off the improvement and hence it is impossible to subject it to levy and sale by the State-taxing power.

These percentages of Federal ownership of land in the States show that there is not a single State in this Rocky Mountain region that is in a condition to stand the expense of government over all of the land without having the right of taxation. Why, Mr. Chairman, I never noticed the difficulties in the situation until I came to be governor of Colorado and got to figuring around for revenue, and I saw that in the Eastern States they raised quite a good deal of revenue, and when I discovered that of all the land in Colorado, 62 per cent, including coal lands and including water-power sites, is in Federal ownership and can not be taxed, I could readily see why the revenues of the State were small. This Government is in partnership with the State government. It was never intended that the United States Government should use its powers to limit or restrict the functions of the States. The States have the worst of the bargain in the division of the subjects of taxation. The States have to do many more things than the National Government. They have to maintain a school system, which alone costs the States more money than the National Government raises within the States. It is necessary for the welfare of the National Government that the educational facilities should be maintained and increased, because the object and purpose, so far as the Government is concerned, is to make good citizens, and good citizens are necessary to a republic. That is one of the things that is enjoined upon the States to do. Our own Federal Constitution guarantees that the States shall maintain a government republican in form. Is it good faith in carrying out that provision of our own Constitution to limit and restrict the States as to taxation so that they can not maintain a good school system?

If this perpetual ownership of the property did not involve exemption from taxation it might be a different proposition. Even then, however, it would interfere, in my judgment, with the powers of the States. If there is one inherent power of sovereignty that is recognized universally it is the power of a State to tax every piece of

property that is within the limits of that State save and except those pieces of property which the State has by express legislative enactment exempted from taxation. But it takes the consent of the State to exempt it. And we recognize that principle every day when, in passing bills for public buildings, we require the State legislature to pass an act ceding jurisdiction to the National Government over the ground upon which the building is to be erected.

It seems to me that when we attempt to hold the public domain in perpetuity, which the authorities all say is held by the Government in trust temporarily for the benefit of the public, that we are infringing upon the very right of the State to maintain its own existence.

When you remember that in our western country taxes upon any piece of property for 30 years, with reasonable interest upon each yearly payment, equals the value of the property itself, you can see that when the State maintains government over all of the public domain and over all of these resources, its people practically pay for these lands every 30 years without ever owning a foot of the same. Unless you put in these acts some provision permitting the State to tax these properties, there is no way in the wide world that the State can exercise its power to tax those lands. For that reason these bills are an attack on the sovereignty of the State, and it seems to me that we should regard them as infringements upon the rights of the States.

I think it is unwise to pass this bill, even if it were constitutional and perhaps it may be, because the courts have held that a five-year lease does not indicate perpetual ownership on the part of the Government. The question came up on the lead-leasing law that existed as to Missouri, Arkansas, Illinois, Indiana, and Wisconsin while Territories until repealed, and the court held, as to a proposition to lease for five years, that it was not unconstitutional; that it was a matter that Congress should determine, and for that reason it could not be said that it was such a disposition as was contrary to the Constitution. If you were to pass a law that the United States Government shall own, continually and forever, water-power sites, coal land, and the public domain, and would lease the same, clearly expressing in the act itself that it should never be the subject of State taxation, I have no doubt but that the courts would hold that it was a violation of the Constitution, depriving the State of the very means of existence. The difficulty is in the application of the principle. The courts will say that five years is a very limited time in the history of a State or of a nation, and they may say that 50 years is a limited time. I, however, believe that these acts are intended for perpetual ownership in the Government and a continuing leasing system forever. While you can not use that belief as a conclusive fact to do away with the determination which is vested in Congress, yet notwithstanding, it does, in my judgment, in spirit violate the Constitution. But the principle is universally recognized that the Nation can not constitutionally deprive the State perpetually of its power of taxation, of its means of existence.

Now, when you remember also that the enabling act of each one of those States provides that when the State enters the Union it shall be on an equal footing in every respect whatsoever with the original States, it seems to me that it is not fair to discriminate against them.

It may be that there is no breach of contract that can be declared upon in a suit. It may be that no remedy exists because the State has no power to sue the National Government, nor has an individual the right to sue the National Government, because you can not sue your sovereign; but the sovereign, for that reason, ought to be more careful to respect the rights of the State.

Senator WORKS. Senator, does not this really mean to provide for perpetual ownership in the National Government?

Senator SHAFROTH. How is that?

Senator WORKS. Does not this bill really provide for perpetual ownership in the National Government?

Senator SHAFROTH. Well, to my mind, it does.

Senator WORKS. It is devoted to a public use to begin with, and some of those uses in the hands of private individuals may become perpetual uses. They do under the laws of California, and they do in your State. If the Government should take over this property it would take it over under the obligation to supply those uses continuously and perpetually. So it would if it was turned over to somebody else, as it might be under the provisions of the bill, at the end of 50 years. That means perpetual ownership, it seems to me.

Senator SHAFROTH. To my mind it does too, but you must remember that the judiciary has always been careful not to infringe upon what they think is the discretion of the legislative body, and for that reason, in the lead-mining cases the court would not determine that leasing for a limited time showed conclusively that perpetual ownership by the Government was intended.

Senator ROBINSON. So far as that is concerned, would it be possible for this present Congress to deprive the future Congresses of the right to dispose of the public property of the United States? This Congress might make any declaration it wants to on the subject, and the next Congress might make a contrary declaration. Of course if rights had vested in the meantime they would have to be taken care of.

Senator WORKS. That is what I meant to suggest, that the Government could not make any disposition of the lands that would interfere with vested rights.

Senator ROBINSON. But this Congress might make some disposition of the Government property, and the next Congress could take that property over and sell it as long as there was no interference with vested rights.

Senator SHAFROTH. When we look at the intent and purpose of this bill it is to establish a definite and fixed policy for all time, as I take it. While that to my mind is clear, yet I do not believe that the Supreme Court would hold that it was conclusive. I have no doubt that under some conditions, if it were made clear and plain that it was depriving the State of the means of taxation, it would be held unconstitutional.

I hope that this committee will take into consideration also that the Western States have had a very hard time to settle their lands. It is not the same as in the East here, where you have rainfall. We have to make large expenditures in order to get the lands under cultivation; our markets are far and freight rates high. To say that a State which has those disadvantageous conditions should not have

the same full benefit of its resources which every other State has had, it seems to me, is very inequitable.

And then again we find that these Western States are paying their full proportion of the taxes to the United States Government. Five million dollars is what my State pays to the Federal Treasury: $5,000,000 a year we pay to the Federal Treasury, and yet we raise by taxation for State purposes only $1,700,000.

Senator ROBINSON. What do you mean when you say your State pays $5,000,000 to the Federal Treasury?

Senator SHAFROTH. I mean that the internal-revenue taxes and the customs duties and the income taxes all amount to $5,000,000 a year. It seems to me when we pay nearly three times as much to the Federal Government as we do to our own State government, our State government being limited by the fact that we can not tax any of these lands that are in public ownership, you are not treating us fairly under that clause of our enabling act which says that "the State when formed shall be admitted into the Union upon an equal footing with the original States in all respects whatsoever."

Now, it seems to me, from the standpoint, then, of attacking the sovereighty of the State and depriving it of the means of existence, that Congress ought to refrain from putting anything in the way of a leasing bill upon the people of the West.

Even if it were legal to pass a leasing bill there is another thing that ought to be taken into consideration, and that is the fact that it would be unwise, because you are bound to have a large Federal bureau, which will produce an irritation of our people as great as that which exists as to the Forestry Bureau to-day. The Forestry Bureau creates as much irritation among the people of my State as does a Federal election supervisor down South, and their exercise of authority is resented by the people of my State.

Is it wise, even if Congress has that power, to foist that system on our people? Is that the kind of harmony that we are going to have between the State and National Governments? Is it not, as a matter of fact, something that ought to be avoided, because we are in equal partnership in this matter of government? Now, you say, "How do we know that?" Why, we know it from resolutions that are passed continuously by the great political parties of that State. I have some few of those resolutions and I want to show you just what they are. Not by the Democrats alone, and not by the Republicans alone, but by the Republicans and the Democrats. I want to read you a few of those resolutions that have been passed in conventions.

Here was the platform of 1908 in Colorado upon that subject. I do not know that I will read it, but I will ask that it be incorporated in the record without reading.

The CHAIRMAN. That may be done, Senator.

Senator SHAFROTH. I also have here and would like to have it put in the record the Democratic State platforms for 1910, 1912, and 1914, and the Republican State platforms for 1912 and 1914 upon that subject.

The CHAIRMAN. They may be put in the record.

(The documents referred to are as follows:)

DEMOCRATIC STATE PLATFORM, COLORADO, 1908.

Seventh. *Public lands.*—We commend forest reserves upon real forest areas, but condemn the present arbitrary and unjust administration of the same, and demand that the administration of the reserves be placed by Federal law under effective State and local control.

We demand the immediate exclusion of agricultural and unforested areas from the reserves; the dismissal of the army of useless officeholders in our midst, maintained at the public expense of the people of the West for the upbuilding of a gigantic political machine at Washington; the abolition of unjust grazing taxes; the repeal of a system of timber sales which puts the lumber market in the hands of a few and by which the price of lumber has been doubled to the consumers.

We demand the repeal of all laws endowing the forestry department with authority to decree and establish rules and regulations concerning the administration of the forest reserves and declare all such matters to be legislative in their character, which should be covered by congressional enactment.

We are unalterably opposed to the pronounced purpose of the Republican administration to lease the balance of the public domain, thereby withdrawing the land from settlement. The people of the West are entitled to the use of the natural resources of their localities with which to build their States. They ask to be put on an equal footing with the people of the East in this regard, and will be satisfied with nothing less.

DEMOCRATIC STATE PLATFORM, COLORADO, 1910.

We reassert our position upon the public-land question as adopted at Pueblo in 1908, and declare the right of the State to the control of the resources within its boundaries; we are in sympathy with the policy of considering the natural resources of the Nation and the State in a manner which will protect the right of future generations, but we are unalterably opposed to the bureaucratic, arbitrary regulations which work hardship on the homesteaders and the miners and retard the development of the State.

DEMOCRATIC STATE PLATFORM, COLORADO, 1912.

We denounce the policy of the Republican administration, which, having retarded our development, now proposes to withdraw all the remaining agricultural, grazing, and mineral public lands from all forms of entry, with the expressed determination of imposing upon the West a permanent bureaucratic rule and Federal leasing system of all the Government resources within our borders, and thereby disastrously retarding the development of our State and depriving our Commonwealth of its just and constitutional rights.

DEMOCRATIC PLATFORM, COLORADO, 1914.

We are opposed to a Federal leasing system of the national resources. Such a policy will result in centralization of authority, retard the growth of population in the public-domain States and permanently exempt vast areas of land from settlement and the burden of taxation for State and local purposes.

We renew our insistence of two years ago that the waters of the natural streams dedicated to the uses of the people of the State should be open to appropriation for beneficial purposes without Federal restriction and that Senate joint resolution No. 11, introduced by Senator Thomas into the Senate of the United States, authorizing the State of Colorado to test this right in the courts by suit against the Secretary of the Interior be enacted.

REPUBLICAN PLATFORM, COLORADO, 1912.

We condemn the policy of extreme conservation inaugurated by President Roosevelt, James A. Garfield, Gifford Pinchot, and other extremists, and we insist that the public lands and resources of this State should be so administered as to place them in the hands of actual settlers and those who would develop them at the earliest possible moment and without undue and unreasonable restrictions. We are unalterably opposed to the petty and annoying interference by vast numbers of Government employees, operating under bureaus at Washington, as such conduct prevents and has prevented the development of the mining resources of the country, has retarded the utilization of its water powers, and has driven settlers to seek homes in Canada and elsewhere.

We affirm that the water of every natural stream within this State is the property of her people and that the right to use the same within the State for beneficial pur-

poses is unlimited, and we condemn the efforts of the Reclamation Service and the Interior Department to prevent the utilization of the waters of our streams by the people of this State as unwarranted, unjust, and unauthorized by law.

REPUBLICAN PLATFORM, COLORADO, 1914.

We affirm that the water of every natural stream within the State is the property of her people, and that the right to use the same within the State for beneficial purposes is unlimited; and we condemn the efforts of the Reclamation Service and the Interior Department to prevent the utilization of the waters of our streams by the people of this State as unwarranted, unjust, and unauthorized by law.

I am sorry I have not the declarations of the Republican Party of Colorado at former conventions, but they were on the same line.

Senator SHAFROTH. I will read one paragraph from the Democratic State platform in 1908:

We are unalterably opposed to the pronounced purpose of the Republican Administration to lease the balance of the public domain, thereby withdrawing the land from settlement. The people of the West are entitled to the natural resources of their localities with which to build their States. They asked to be put on an equal footing with the people of the East in this regard, and will be satisfied with nothing less

The Democrats were putting it on the Republicans. That was the platform of six years ago.

Senator WORKS. The next time the Republicans were laying it on the Democrats.

Senator ROBINSON. Whatever politics there may be in this matter, the Republicans are entitled to the credit for having at least inaugurated the policy so long as we are getting into a political controversy, or an attack upon the Democratic Party--of establishing the forest reserves.

Senator WORKS. That is not what I was saying.

Senator ROBINSON. That is what the resolution was.

Senator WORKS. But that was a Democratic resolution.

Senator SHAFROTH. Yes; that was a Democratic resolution.

Senator ROBINSON. I know that.

Senator SHAFROTH. Here is a Republican resolution, when the Republican Party had control of affairs. Here is the State platform of the Republican Party for 1912. I am calling this to the attention of the committee to show that the sentiment is nearly unanimous out there; that it is not a matter of dispute in our State; that the Republican Party comes to the front in its denunciation of it and the Democratic Party comes to the front in its denunciation of it, and the Republican Party did it when they were in power. Here is the platform when President Taft was in power.

Senator ROBINSON. So far as that is concerned, I take it you are familiar with the sentiment of your State, and certainly, in the absence of any controversy about it, I accept your statement about it as entirely true without the reading of those resolutions. I suggest that you save us time and just simply state the facts.

Senator SMOOT. But let the resolutions go in the record.

Senator ROBINSON. Yes.

Senator SHAFROTH. I believe that this denunciation by the State platform of the Republican Party in 1912, when President Taft was President, was the most bitter arraignment of it, and I have already asked that it be put in the record.

Senator WORKS. I do not think this matter ought to be made a political question at all. I infer from Senator Robinson's remarks that

he is under the impression that I am attempting to make it a political question. I am as far from that as anybody, I think. I think this is too great and important a subject to be mixed up in politics.

Senator SHAFROTH. And so do I.

Senator WORKS. My remark simply was that when either party was in power they would lay it onto the other.

Senator SHAFROTH. That quite likely is true, but what I am trying to do is to show that it is inexpedient to fasten upon a State a doctrine that is repulsive to nearly every citizen of that State, irrespective of political affiliations.

Senator WORKS. I fully understood what your object was, but the purport of my remark was apparently misunderstood.

Senator SHAFROTH. In order to show that, I want to show that not only the Democrats, but the Republicans themselves, in their platform, even when they were in power, denounced this doctrine.

The governors of 9 of the Rocky Mountain States at a conference held in Salt Lake City in 1913 declared against a leasing system by the Federal Government and in another conference held in Denver in 1914 declared in favor of the entry and sale of the public domain so as to become the subject of State taxation.

Now this last year, 1914, both the Democratic and Republican Parties again came to the front in their denunciation of the leasing system; which shows also that opinion there is almost unanimous against the proposition, and I do it for the purpose of showing that it is inexpedient for the National Government to go into the borders of a State and attempt to exercise a power there which in the opinion of nearly all of its citizens is contrary to the welfare of that State. Not only that, but I have brought over the Session Laws of the State of Colorado for the purpose of showing the joint memorials—no division on political lines—one passed in 1911, which denounces this leasing system and declares that it is in violation of the State's rights, and in it the senate and house protest against it in every way that they can. And again in 1913, in a memorial which was passed on March 8, 1913, there is a declaration made by the general assembly calling attention to the fact that a leasing system is contrary to what they regard as their rights under the Constitution, and would be contrary to equity and equality among the States.

Now, Mr. Chairman, I would like to get these two resolutions in the record.

The CHAIRMAN. Very well; you may put in what you want.

(The resolutions referred to are as follows):

SESSION LAWS OF COLORADO, 1911. SENATE JOINT MEMORIAL NO. 11. FOREST RESERVES.

[By Senator Napier.]

ADMINISTRATION OF THE PUBLIC DOMAIN.

To the honorable the Senate and House of Representatives of the United States of America in Congress assembled:

Your memorialists, the General Assembly of the State of Colorado, respectfully represent:

A. That, upon April 23, 1909, this body memorialized you, setting forth the injury and injustice inflicted upon the State through the maintenance and the administration methods of the forest reserves within its exterior borders, and praying for relief therefrom.

B. That such prayer has not been granted, nor any indication afforded of its favorable consideration.

C. That to the contrary, the officials of the Forest Service have, since that date, undertaken to correct the boundaries of the reserves, and while having caused the elimination of certain of those lands, contemporaneous with such proceedings, they have selected, designated, and recommended the addition of other lands—very largely strictly nonforest lands—far in excess of the eliminations, and which would thereby effect a net enlargement of the forest reserves within the State.

D. That the President, in his message of December 6, 1906, recommended:

"That the limitation now imposed upon the Executive which forbids his reserving more forest lands in Oregon, Washington, Idaho, Montana, Colorado, and Wyoming be repealed."

This, presumably, for the purpose of acting upon those recommendations and adding such lands to the reserves.

We feel justified in this conclusion by the evidence of his having so proceeded in the Territories, where the said act did not apply.

In addition to and in enlargement upon that said memorial of April 23, 1909, we, your memorialists, respectfully represent:

First. That H. R. 11798, commonly known as the Weeks bill, now pending before the Senate, while transparently masquerading as a measure pertaining to the navigation of navigable streams, as an excuse for violating the Constitution, is in reality an undertaking to extend the system of Federal feudalism, under the guise of forest reserves, throughout the United States.

Second. That the provisions of the said bill, if put into effect, would deprive the people of this State of the ownership and control of the waters of our streams from the head of navigation to their extreme source; would place the lands of the forest reserves practically outside the jurisdiction of the State; and would terminate and annul all unperfected lands and mining claims on such lands.

Third. That the waters and the right to their use belong to the people of the State under the terms of our Constitution—a compact accepted and approved by the Federal Government when Colorado came into the Union.

The enjoyment of that ownership and right by the people of the State the officials of the Federal Government now undertake to deprive them of because, incidentally, some of the public lands are in proximity thereto, and the application of the right of eminent domain, by the paramount ownership, denied.

The plan of these officials, as pertains to water powers, as enunciated in the last report of the Forester, is a provision for a tax of $1 per horsepower per year, by virtue of the arbitrary demand for Federal consent to the enjoyment of the people's ownership and right in those waters. Any provision whatsoever as a possible benefit to the people in return therefor in the nature of "conservation," a guarding against monopolies, or the protection of the consumer against exorbitant prices, is ignored and omitted. It is wholly and entirely a measure to impose a Federal tax upon our people in the enjoyment of their natural resources.

The United States Geological Survey estimates the possibilities of the water power development of Colorado at from 1,000,000 to 2,117,000 horsepower. Accordingly, an annual tax of $1,000,000 to $2,117,000 on the consumers of our State to the Federal Treasury is of no mean proportions.

Fourth. That the principles involved in the above example respecting water powers are no more unjust to the people of our State than those forming the basis of the contemplated measures for imposing a like Federal tax upon our other natural resources, viz., coal, oil, natural gas, phosphates, and other minerals.

Had these principles been applied from the first in the administration of the public lands of Colorado and with such royalty as is proposed for Alaska, viz, $0.05 per ton, our people the past year would have paid into the Federal Treasury $600,000 for the privilege of digging their own coal. And, eventually—based upon the United States Geological Survey estimate of Colorado tonnage, viz, 371,000,000,000 tons—we would pay as such tax, $18,500,000,000. This would effect a perpetual tax, and no less unjust than to tax the product of our wheat fields.

We would further respectfully request you to reflect that ours is not exclusively an agricultural State. And, in lieu of our territory being a vast and rich farming country, to afford us perpetual revenue with which to maintain State governmental institutions, we, as a State, are entitled to whatever governmental revenue there may be arising from our natural resources.

Fifth. That the vast territory of public domain assumedly ordained to be administered in perpetuity, the great diversity of governmental undertakings incident thereto, the enormous business interests of our people involved, and the large number of people affected thereby demand that the government of the public domain be through definite laws and with readily available judicial hearings.

As an instance in illustration of this, we point to the recent ruling of the Secretary of the Interior, reversing the ruling of the Commissioner of the General Land Office, permitting settlement upon the former lands of the Ute Indians in the western portion of our State. This, like hundreds of others, was purely a legal question and should have gone to the courts in the first instance.

When it is contemplated that our mines, water power, oil, gas, phosphates, and other industries are to be subject to the supervision and domination of subordinate Federal officials, provision for the application of definite laws and relief through readily available judicial hearings should likewise be contemplated.

Sixth. That in the ultimate we adhere to the principle—and we believe it sustained by the Constitution—of Government ownership of the public lands as a trust for their disposal; State authority in the regulation of the use of and State benefit to all governmental profit or revenue arising from the natural resources within the State, except profit to the Government to an extent in keeping with the long-established custom and practice of the Government in the sale of lands and timber; and except, also, its retention and administration of actual timberlands for forestry purposes.

Affirming, however, that this State will willingly and effectively preserve and develop to their greatest efficiency the forests within its borders whenever afforded a proprietary right thereto.

To these features of vital importance to our social, industrial, and political existence we point you and respectfully pray for relief and protection.

Approved, March 8, 1911.

SESSION LAWS OF COLORADO, 1913. HOUSE JOINT MEMORIAL NO. 5. PUBLIC DOMAIN.

[By Representative Old and Senator Napier.]

To Hon. Woodrow Wilson, President United States of America, and the Congress of the United States:

Your memorialist, the General Assembly of the State of Colorado, respectfully represents that under the present Federal policy of control of the public domain the following conditions obtain:

I. The people of Colorado are in favor of conservation in the meaning of prevention of waste and monopoly, but are unalterably opposed to it in the definition of preserving our lands and resources in their present state for future generations.

We agree that these natural resources belong to all the people, but this ownership is not now different from what it always has been; namely, subject to the right of the citizen to acquire the same under liberal laws to the extent necessary to satisfactory settlement and the building of permanent homes.

II. It has been charged that the Western States have failed in the past to do their duty in the conservation of these resources, but those who make these charges utterly fail to consider that any unlawful acquisition or waste was committed under Federal laws and on public lands, and that if the States, having no control, were powerless to prevent it. They also fail to recognize the fact that the amount of lands unlawfully acquired was a mere trifle compared with that lawfully acquired by bona fide settlers and others.

III. The older States have had, and still have, the benefits arising from private acquisitions of all the public lands within their boundaries, receiving revenue therefrom through taxation and otherwise, and it is therefore a great injustice that they should now seek to impose upon the Western States obstructions and burdens with which they themselves did not have to contend.

IV. We deny that it is right or advisable for the Federal Government to retain the title to and lease the public lands for any purpose, as the history of the country shows that in 1807 Congress authorized the War Department to lease the lead mines in the territory afterwards embraced in the States of Missouri, Indiana, Illinois, Wisconsin, and Iowa, reserving to the United States a royalty of one-sixth of the product.

This system was vigorously opposed by the residents of the region involved from the very beginning, and after a few years' trial the Missouri Legislature and the governor of Illinois protested against it. Presidents Polk and Fillmore urged its abandonment. The Secretary of War condemned it, saying that the benefit to the Government bore "no just proportion to the injury done to the country, first by retarding the settlement of the country, and, second, by the demoralizing influence of the system."

Year after year congressional Committees on Public Lands reported against it. One of these reports concluded as follows:

"When the United States accepted the cession of the northwestern territory, the acceptance was on the express condition and under a pledge to form it into distinct

republican States, and to admit them as members of the Federal Union, having the same rights of freedom, sovereignty, and independence as the other States. This pledge, your committee believes, would not be redeemed by merely dividing the surface into States and giving them names, but it includes a pledge to sell the lands, so that they may be settled and thus form States. No other mode of disposing of them can be regarded as a compliance with that pledge."

V. For nearly 40 years this controversy was waged with increasing intensity until 1846, when an act was passed directing the sale of these lands.

This condemned and discarded policy is now sought to be resurrected, and in pursuance thereof there have been withdrawn forest, coal, oil, phosphate, and power-site lands, aggregating in Colorado over 21,000,000 acres, equal to 33 per cent of the total area of the State, together with similar amounts in other Western States, so that, in all, the area thus withdrawn is greater than the combined area of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Pennsylvania, both Virginias, Ohio, Kentucky, Indiana, and Illinois, and thus nearly 300,000,000 acres are now, and have been for several years, practically out of reach of individual enterprise or taxation for the support of State government.

This obstructive policy is a departure from the policy of the past 50 years and in violation of the rights of these States as provided in their enabling acts admitting them into the Union, their constitutions, and the fundamental principles on which the Union of the States is predicated.

The idea that the leasing of the forests and other public lands for grazing purposes to stockmen, reserving to the settler and miner a right to enter them, will give the latter adequate protection is a fallacy, for the reason that it is obvious that such entries will necessarily interfere with the proper handling of stock. Where a stockman has 1,000 acres or more under such a lease, and a homesteader should undertake to enter 160 or 320 acres of the best of it, it is a certainty that the stockman would in every way, not positively unlawful, discourage the settler, unless we credit the stockmen with less than ordinary sense of self-protection. And it is equally certain that he would succeed in preventing the entry, even if he had to buy the settler off.

The inevitable result of such leases will be to substantially end homesteading and mining on the public lands.

VI. We assert that the States are vested with the right to control the waters within their respective borders (subject only to the right of the Federal Government to protect navigation on those streams that are navigable), to dispose of them to those who will use them for beneficial purposes, and that all returns therefrom, direct or indirect, justly belong to the States and not to the Federal Government.

VII. Reclamation of arid lands when undertaken by the United States Government, should in all cases recognize the rights of the States to control the waters within their borders, and should also recognize the equitable rights of its water users and other competitive projects and those of private enterprises.

These projects and enterprises should not be made by officers of the Reclamation Service an excuse for the refusal to approve of rights of way for occupancy for lands under private irrigation projects; such delays seriously obstruct private enterprises and the development and improvement of lands belonging to the States, and we ask that any such refusals be revoked.

We further ask that the Reclamation Service take immediate steps looking toward the early completion of all projects now under way within this State, in order that early settlement under these projects may take place.

VIII. The rapid descent and general character of mountain streams gives such endless opportunities for water plants, that any monopoly of the same is physically impossible. Indeed the idea is growing rapidly that the small power plant is the coming one. When water has served its purpose for one power plant it continues its descent. It is not consumed nor does it vanish. Its volume is as great after as before and therefore, but a little lower down in the mountains another power plant may be constructed and so on while the stream shall last.

These delays have seriously obstructed not only these private projects, but have also interfered with the irrigation and improvement of several hundred thousand acres of land belonging to the State of Colorado and granted under the laws of the United States for the purpose of improvement and sale by the State.

We ask that these unlawful refusals be promptly revoked and further delays forbidden.

IX. We recognize that some good has been accomplished by the Forest Service, yet, at the same time, its cost has been many times greater than its benefits. It has materially hindered the settlement and development of the country, chiefly because of the hard and fast rules made at Washington by chiefs unfamiliar with actual con-

ditions and administered by subordinates, many of whom are equally unfamiliar with such conditions.

As to the scientific forestry promised, it is only necessary to refer to the reports of the Forester to show that his management in many respects is most unscientific. His reports show that billions of feet of timber in the national forests are overripe, decaying, and decayed, are an actual fire menace to the remainder, and ought to be cut. Yet, the high prices he asks and the rules and regulations enforced are greatly restricting sales and cutting.

We urge that a committee, congressional or otherwise, be immediately appointed to visit Colorado and investigate the conditions referred to above and report on the same. It seems necessary to have the committee pursue its investigation on the ground, as few of those who suffer by the methods in force would be able to advance the expenses of a trip to Washington. Besides, an actual view of many of these things will disclose features which it would be difficult to make clear by testimony.

X. An unjust discrimination is made between grazing and other agricultural lands. The major portion of this State is composed of what is termed grazing lands, and grass is the greatest agricultural crop known and the most indispensable. All lands at present chiefly valuable for grazing should be as freely open to entry as are "farm" lands, but in sufficient quantities to support families. More than three-fourths of our present cultivated area was originally located as pasture, and it was largely through this privilege that our present cultivated area was developed.

There is hardly an acre of grazing land on the plains that will not ultimately become agricultural lands with the development of storage of water and the economical use thereof.

XI. Nearly all of our metalliferous lands have been included in the forest reserves, since which time not a single important mining camp has been opened. The unwarranted interference by the Forest Service is largely responsible for the falling off of millions of dollars in the annual metal output. The man who is willing to put his labor and money into the development of a mining claim is the person best fitted to classify the land and should be permitted to acquire it.

We venture the assurance that if 40 years ago the forest reserves had been established neither Leadville nor Cripple Creek nor a score of other mining camps would have been discovered or developed.

Although our lands are of great variety they are open to entry for but few purposes and in unsuited quantities. For instance, a piece of land can not be taken merely for a home.

XII. In Territorial days Congress gave us the water of our natural streams and confirmed that right in the acceptance of our State constitution. Certain Federal bureaus are trying to take away that right by denying rights of way over the public domain. The contention of Federal authority, as in the case of the Engle Dam, for the first storage of water at the lower end of the stream, instead of near the source of supply, would prevent the repeated use of water for power and irrigation up stream, would uselessly deprive large areas of development, and would therefore be contrary to the principle of "the best use" as demonstrated by the experience of more than half a century.

The diversion and use of water when streams are high equalize the flow, furnish a better supply of water during the dry season, and by lessening floods save lives and property on the rivers below.

Special agents are permitted to protest against the validity of entries without any knowledge of facts relating thereto. They should be required to make their objections at the time of final proof, that the entryman might face his accusers.

XIII. The courts should be opened to land disputes, that citizens may be afforded an opportunity to enforce their rights, instead of the system now in vogue of determination through star-chamber proceedings by administrative officers.

XIV. Under the express terms of the enabling act Colorado was admitted to the Union on an equal footing in all respects whatsoever with the original States. To be on an equal footing we must have the power to tax the land and other property within the State, for without that power we can not maintain State and local governments and institutions. The present policy of the Federal Government is to place our lands and resources on a revenue basis, paying taxes in the form of royalties into the Federal Treasury, thereby seriously interfering with the means of supporting our needy growing institutions. The effect of the present policy is to permit local taxation only upon farm and city and town lands now privately owned. This might be less objectionable in Iowa or Illinois, where practically all of the land is tillable. More than half of the area of Colorado is not tillable under any known method, but is composed of mineral, grazing, and timbered areas, which take the place of farm lands

and which are just as expensive to govern, if not more so, than are the farm lands. The policy, therefore, which withdraws these from taxation is a serious handicap to the State.

While our resources are of great variety they are not naturally ready for use. On the average there has been a dollar in expense for every dollar in precious metals taken from the mountains, and the value of our lands is measured by the labor required for their irrigation and development. Without the value of the presence and industry our people have added to them, there is not a dollar's worth of value in any of our natural resources. Every dollar, therefore, charged in the form of royalty on the products of these resources is a tax on human toil.

We can not hope to secure the best settlement of our lands nor development of our resources upon a tenantry basis. The man who is permitted to lease lands cheaply for grazing will try to keep them for pasture.

XV. There is but one-third of our area on the tax rolls with extraordinary educational requirements to equip our people to meet mining, industrial, irrigation, and other agricultural development. We must, therefore, increase the taxable area to include all the lands if every portion of the State shall bear its just share of this burden.

A large part of our territory is included in the Louisiana Purchase in the treaty ratifying which it is decreed.

"The inhabitants of the ceded territory shall be incorporated in the union of the United States and admitted as soon as possible, according to the principles of the Federal Constitution, to the enjoyment of all the rights, advantages, and immunities of citizens of the United States."

If this provision were complied with, the present bureaucratic government over large areas of our State would be impossible. Is there any reason why people who must live in and do business with the said reservations should be deprived of the same rights and privileges enjoyed by the citizens of the older States? And what reason is there to suppose that forests can not be grown and protected or monopoly prevented under the republican form of government?

The incentive of owner-ship is necessary to secure the best development of our mineral territory, and we can not expect the best citizenship unless people are permitted to own their own homes, no matter in what business they engage.

The private-owned land in the State is scattered promiscuously among the Federal-owned land, and there can be no hope of harmonious action or good feeling through the intermingled double jurisdiction over our territory.

The Government purposes as a landlord to go into almost every kind of business within the State on untaxed property in competition with private-owned and taxed property. The public business does not need to pay expenses, but the owner of the private property must pay taxes to make up the loss of his Federal competitor. The Federal Government engaging in business as a proprietor must necessarily occupy a contractural relation with the citizen, under which the Government may enforce its contract against the citizen, whereas, the citizen may not enforce his contract against the Government.

Under the present administration of the forest reserves the Government acknowledges the moral right of the State to tax the property by returning to the State 25 per cent of the proceeds from sales, rentals, and special privileges. It assumes the right however, to dictate the disposition of this rebate by decreeing that it shall go to the support of roads and schools, two popular purposes, but ignoring the necessity of the State to protect in the courts the very lives of those living upon Federal-owned property and the necessity for the maintenance of educational, charitable, and penal institutions by the State.

XVI. The continued withdrawal of our lands and resources from entry and placing them upon a revenue basis to pay royalties into the Federal Treasury means their control by Congress, and that Texas, which never had any public lands, would in the House of Representatives have four times the legislative power over our territory that we ourselves could exert; and that New York, which has no public domain, would have ten times the legislative power over our territory that we ourselves possess, and that, too, without any adequate knowledge of local conditions and necessities.

The double jurisdiction over the territory of the State has led to strong opposition to Federal officials, against whose orders and rules there is no recourse in the courts, and employees of the Federal bureaus, defending their position, have been constantly doing missionary work in behalf of the general principle of Federal control of our lands and resources.

The Forest Service, for instance, through its numerous employees, has been able to enlist the eastern press in praise of its work and to create a sentiment against the West.

The Federal Constitution declares: "The United States shall guarantee to every State in the Union a republican form of government"; not a republican form of gov-

ernment over part of the State, but over it all. Certainly no one can contend that a republican form of government exists under the bureaucratic control already in force over a large part of our territory and sought to be enforced over two-thirds of our area, with its arbitrary rules and regulations enforceable at the pleasure of the bureau with discretionary power, with its natural antagonism to State laws and State control, with a long list of special privileges to enlist support, and with all the evils therefore of a system of favoritism.

"Republicanism and bureaucracy are incompatible existences." (Century Encyclopedia.)

Our laws and customs are built upon experience and our people are better acquainted with local conditions and necessities and are more interested in building the State aright than are the people of the East. If there is fear of monopolization, Congress, in the act of session, could provide effective means for reversion of title to the State whenever monopoly is attempted. The administration of our public lands and resources should be under the jurisdiction of Secretaries of the Interior and Agriculture, familiar from experience with the local situation, in order that it may be for the settlement of our lands, the development of our institutions, and the betterment of social conditions.

XVII. We therefore earnestly request under existing or more appropriate laws such an administration as will secure the settlement of our public lands and the development of our resources, placing them under the tax rolls with effective provisions against monopolization and waste. We ask for no advantage or privilege not enjoyed by the older States, but feel we have a right to insist that we be placed on an equal footing in all respects whatsoever with the original States to own and use our lands and resources to build our State and support its government and institutions.

Approved March 8, 1913, at 1.49 p. m.

Mr. Chairman, is it wise for the Federal Government to force upon a State a policy so obnoxious to its citizens?

Mr. Chairman, when you come to the subject of water powers there are additional reasons against water leasing bills. The reason is that running water is not subject to ownership any more than air or light, and the courts have so held time and again. The use of water only can be appropriated, and that has never been the subject of taxation in my State.

I want to call your attention to the fact that our constitution, when the State was admitted into the Union "upon an equal footing with the original States in all respects whatsoever," contained this provision with respect to water:

Paragraphs 5 and 6 of article 16 of the constitution of Colorado provided as follows:

The water of every natural stream not heretofore appropriated within the State of Colorado is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the State, subject to appropriation as hereinafter provided.

I will state that the authorities are that the rule of priority of appropriation of water prevails, irrespective of State lines. That has been the decision in a recent case in the United States District Court of Colorado, and is the decision of the Supreme Court of the State of Wyoming, as well as the Supreme Court, I think, of the State of Montana. So that appropriation of the water is the determining factor as to who is entitled to the use of the same. The constitution of Colorado further provides:

The right to divert unappropriated waters of any natural stream for beneficial uses shall never be denied. Priority of appropriation shall give the better right between those using the water for the same purpose, but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same those using the water for domestic purposes shall have the preference over those claiming for any other purpose, and those using the water for agricultural purposes shall have the preference over those using the same for manufacturing purposes.

There was a United States Supreme Court decision in the case of Kansas against Colorado (206 U. S., 46), which held as follows:

That the Government of the United States is one of enumerated powers; that it has no inherent powers of sovereignty; that the enumeration of the powers granted is to be found in the Constitution of the United States and in that alone; that all powers not granted are reserved to the people. While Congress has general legislative jurisdiction over the Territories and may control the flow of waters in their streams, it has no power to control a like flow within the limits of a State, except to preserve or improve the navigability of the stream; that the full control over those waters is vested in the State.

Now, it seems to me that when this Government in a bill proposes to control the rental of the waters of a State by denying to water-power enterprises rights of way as now provided by law over lands it is necessary for the conduit or transmission lines to cross, it is nothing but a hold-up proposition. Take, for instance, the illustration that I heard from one gentleman here before this committee. His company had a complete water-power system except 28 acres of its large reservoir. The entire plant had cost, I believe, $26,000,000. The Government would not grant or permit them to have the use of that 28 acres because they would not enter into a contract of lease with the Government subjecting their whole plant of many many acres of land to the jurisdiction of the Federal Government.

Why, is it possible that the National Government wants to take the position, when it does not own the water, that because it owns some fraction of the land, or some quantity of the land, I care not how much it is, through which it is necessary to have a right of way, to impede a great gigantic enterprise by denying the right-of-way unless the company yields up a part of the dividends it earns?

It is like a person who owns a farm and does not want a railroad to go through it. It would be a sad condition of affairs if he had the power to say, "I will not let you go through my land unless you give me a certain percentage of the revenues derived from the operation of your road." Can there be any justification for a demand of that kind? Do you not think such demands make the people of the West feel that the Government of the United States is not treating them right? Do you not think, that when they see an attempt to use some power of theirs for the purpose of impeding a great enterprise by its officers simply saying "You shall not cross this land without you enter into some kind of an arrangement by which part of your earnings are to be paid over to the National Government, which in time is to go, in part, to the State," that that will be resented by the people of the West?

If you can convince people that that is right, then their moral sense is in a sad condition. It can not be right. If the control of this water belongs to the State and does not belong to the National Government this is simply attempting to do indirectly what it can not do directly, and no government can afford to take a position of that kind. No government can use its power in such a way and have it satisfactory to the people. And that is going to produce irritation; it is going to produce discontent; it is going to produce a continual effort on the part of the people of the West, if these laws pass, to repeal them from the day they become a part of the statutes of the United States.

Now, it seems to me that in view of that situation we had better take into consideration the fact that these States are part of our

Nation, and that we want loyal citizens out of them, and that we are going to get it if things go according to their natural rights, but when they believe that their rights are being invaded, it is but human nature that they should protest; it is but human nature that they should use all the power in their possession to prevent any such calamity as they believe will follow the passage of such a law.

Now, I want to say that in the bill which I have drawn I have attempted to avoid the leasing proposition, and I want to take that up now and talk about it a little, to see whether or not something of this kind would not be better than a leasing bill. I have no pride of authorship in this bill. If any one can suggest any amendment that would improve it I would be glad to have the amendment made. Not only that, if anybody wants to frame another bill and introduce it, or if you want to report a bill of your own, I have not any pride in the respect that it is my bill, and I do not care one cent about who gets the credit for it, but I do believe that the principle involved in my bill is good, and for that reason I would like to have something of this kind come out of this committee.

It is said that these resources are locked up. Yes, they are locked up, and they have been locked up for eight years. But who locked them up? Why are they locked up? It is by reason of the fact that Federal officers are exercising powers that, it seems to me, it was never intended they should exercise, and for that reason they are locked up. Those lands can by order all be opened to entry under existing law. These lands, instead of being withdrawals, can be made the subject of water-power sites, but so long as these withdrawal orders made years ago stand they can not, and the people who are responsible for that condition are the Federal officers and not the State officers.

Now, Mr. Chairman, I will read the bill which I have introduced. The bill is entitled "A bill concerning water-power plants hereafter located upon the public lands, and for other purposes."

The first section of this bill reads:

That from and after the passage of this act lands included in water-power-site withdrawals shall be subject to entry, location, and disposal under the public-land laws applicable to such lands.

We have laws right now that are applicable, under which all of the reservoirs up to this time have been located, and which involve no experiments with doubtful powers or procedure. They are already there.

The section proceeds as follows:

But only upon the condition that any refusal of claimant or owner thereof, or of his, her, or its assigns, successors, or heirs to obey orders concerning rates of charge for electricity by the duly authorized tribunal of the State in which such water-power plant is situated shall work a forfeiture to the United States of all claims or title to such lands in a proceeding to be instituted for such purpose by the Attorney General in any court of the United States having jurisdiction.

I take it that the principal cry that has been made against water-power development has been that there would be monopoly. Now, nobody wants monopoly. The people of the West particularly, those who would be affected by it, are the ones that would not want it; they are the ones that will have to pay the excessive charge; and if you say that we are not capable of determining this question, it simply denies the fundamental principle of a republic the capacity

of our people to govern themselves. Under this provision the Government can protect its rights until those Western States are able to take care of it under their own laws. When provision is made that these power sites are open to entry, there is a clause which will prevent companies from holding such land unless they conform to the State's utilities commission's rules and regulations. It seems to me that alone would be a sufficient safeguard.

There are three principles that I have attempted to put into this bill. The first is opening these power-site withdrawals to entry, notwithstanding the withdrawals; second, the limitation to curb the monopoly; and, third, the repeal of the authority which exists in the clause which vests the power in the Secretary of the Interior to revoke permits.

It does seem to me that with those three provisions we will have a law which has been demonstrated heretofore to be workable. It is the same law which permits rights of way for reservoirs and ditches for the transmission of water for irrigation. We have never had any difficulty in that matter. We have no law curbing monopoly in that, but nobody has ever heard of any monopoly in water for irrigation, so far as my State or my section of the country is concerned. We never have because we have had a commission that would control rates, and that commission consists of the county commissioners of the county where the water is to be delivered. Whenever a citizen made a complaint to the county commissioners they would cite the irrigation company in and it would have to show cause as to why it should not reduce its rates, and when the hearing was over the county commissioners would decide the matter. Under those laws we have had a development in our State that has been wonderful, and I have never heard the charge made in recent years not in the last 20 years--that there has been any oppression on the part of the irrigation corporations.

Now, then, with these lands restored to entry for the purpose of allowing people to locate and erect water-power plants, it seems to me that we would have the same great water-power development which we have had in irrigation.

When I was in Denver just after the election, I met Mr. Charles Comstock, who was the engineer of the State of Colorado during my administration. We had often talked about the matter of Federal interference with water-power development. He said:

> If these lands could be opened to entry, curbed by the State utilities commission, we would have a development in the State of Colorado within three years costing more than $100,000,000.

See what a wrong has been done us by withdrawing these lands, by holding them so that no person can enter upon them or develop them unless they enter into a contract or lease with the Government! What an outrage it has been upon the development of those sections of the country! He is a great engineer and knows, and since he retired from that office he is a hydraulic engineer, and consequently knows whereof he speaks.

I noticed in New York papers that Mr. Vanderlip about a year ago said that $2,000,000,000 could be used instantly for the purpose of developing water power, and yet it can not be done, because companies will not enter into those arrangements which the Government desires.

Section 2 of this bill is a provision against combinations or ownership of more plants than one:

That no corporation, copartnership, association, or individual, without the written consent of the Secretary of the Interior, shall, directly or indirectly, acquire, lease, control, hold, or own at any one time water-power plants hereafter located upon public lands with capacity in the aggregate of more than 40,000 horsepower, except a plant which receives at its intake the flow of a river which generates more than that amount of power.

Now, I have grave doubt as to whether there ought to be as small a limit as that, and yet in my State that would be ample, because we have no stream in that State that would generate at one point more than 40,000 horsepower.

Senator WORKS. If you have a utilities commission, what is the reason for limiting the amount to be taken at all?

Senator SHAFROTH. There is not any reason if you have an honest commission that can fix rates, and we have that commission now in the State of Colorado, and I think you have it in the State of California. There is not any necessity for that if you have confidence in the commission that has been created in those States and, I think, in nearly every other Western State; and it may be that that ought to be eliminated; but there is such a cry down East here that they are afraid somebody is going to seize something and that companies are going to bribe or going to in some way convince the boards that may be established out there that they ought to have high rates, and that the people out there are incapable of protecting themselves against monopoly.

Senator CLARK. Senator, you do not subscribe to that idea, do you?

Senator SHAFROTH. No; I do not.

Senator CLARK. By writing this into the bill do you not rather intimate that possibly that danger may exist?

Senator SHAFROTH. No; and I will tell you why. There is a condition of opinion that exists here, and I recognize that starting with this conservation movement they have got a great many converts, and they believe that there is danger of monopoly. That is the very groundwork and the very reason for the passage of these bills. On that account I feel that is best, to relieve ourselves from this charge that we are trying to permit a monopoly, trying to permit high rates for electricity, by putting something of that kind in the bill. That is the reason I put it in here. Otherwise, we would have difficulty in passing the bill.

Then this section continues as follows:

No such corporation, copartnership, association, or individual can acquire, own, hold, or control any of the capital stock of any other corporation owning, leasing, holding, or controlling any water-power plant or plants. No director, or stockholder in any corporation shall acquire, control, or own any of the capital stock in any other corporation which owns, leases, controls, or holds any water-power plant within the United States: *Provided, however*, That any such ownership, or interest forbidden in this section which may be acquired by descent, will, judgment, or decree may be held two years after its acquisition and no longer, except by the written consent of the Secretary of the Interior, and in case of minority or other disability such time as the court may decree.

Senator CLARK. I think, Senator, that section is open to criticism in that it might impede the investment of capital. It takes, of course, a great deal of capital to develop these water powers, and ordinarily, as I understand it, financial men rather direct their energies along some particular line of investment. For instance, some group

Now, Mr. Chairman, that is the clause which is supposed to prevent these combinations. The antitrust bill ought to take care of it, but it is put in there for the purpose of preventing monopoly, and I have not any objection whatever to doing anything we can, in every way possible, to prevent monopoly in the use and control of water power or of the lands. I recognize the fact that there are a great many people who believe that there is a monopoly in water power plants and that it is oppressing the people with high rates, and for that reason, in order to satisfy them, I feel that we should not in any manner oppose the passage of laws that will prevent monopolization. If such monopoly exists, the withdrawal of water-power sites preventing competition has caused it.

Now, then, the fifth section is the repeal of the right of the Secretary of the Interior to revoke permits. It reads as follows:

SEC. 5. That the last paragraph of the act entitled "An act relating to rights of way through certain parks, reservations, and other public lands," approved February fifteenth, nineteen hundred and one, which paragraph reads as follows: "*And provided further*, That any permission given by the Secretary of the Interior under the provisions of this act may be revoked by him or his successor, in his discretion, and shall not be held to confer any right of easement or interest in, to, or over any public land, reservation, or park," be, and the same is hereby, repealed.

I presume that everybody concedes that no company or capitalists would undertake to build a water-power plant under any such provision, yet this very provision was put there at the instance of the officers of the Interior Department. It was put there, Mr. Chairman, as it was supposed, to curb and control monopoly. And yet what has been its result? Simply a locking up of the water powers of the West. If they were mistaken in a principle of that kind, is it not possible that they can be mistaken in a leasing proposition which has proven a failure heretofore, which involves many inconsistencies, and which, it seems to me, would be fatal to the development of the West?

Under that provision Secretary Garfield, two days before he left office, revoked 40 permits issued to water-power plants, some of which had been completed and one of which was furnishing electricity to the city of Denver from the western slope of Colorado. And those permits are tied up and have been tied up and are in litigation still as to whether in order to erect their wires across the mountains they have to get a permit, and that permit to be revocable at the will of the Secretary of the Interior.

(The committee here took a short recess to answer a call of the Senate.)

Senator SHAFROTH. Now, gentlemen, what I was trying to explain at the time of the call of the Senate were the provisions of this bill which I have introduced concerning water-power plants, and to explain its operation and effect. The first section opens to entry these water-power site withdrawals.

Senator ROBINSON. Do you think that would be workable? If the lessee or operator should fail or refuse to comply with any order that the State commission made, he would forfeit his right. Do you think anybody would establish a plant under that sort of provision and take the chance of forfeiture if he undertook to contest his rights in the courts as against any charge the State commission might fix? It is not even required to be a valid or constitutional order, under your bill as you have prepared it.

Senator SHAFROTH. Well, that may be, but as a matter of fact the provision which is here must contemplate a legal order, and you can not deprive a company of its property. If you do, you violate the Constitution of the United States and also the State constitution. Consequently the order of the State utilities commission must be reasonable or else it is not a valid order.

Senator ROBINSON. The courts may construe it that way, but I think that no man is going to invest his money in a proposition under a bill which provides that any refusal to obey the orders of the State commission shall work a forfeiture.

Senator SHAFROTH. Well, now, that may be. I myself would prefer that those entries be made without that limitation, so far as that is concerned, leaving it to the State commission to deal with the question of its own accord. I do not like Federal regulation with reference to this matter.

Senator ROBINSON. I just merely pointed out to you this effort in your bill to invoke the aid of the Federal Government to enforce the orders of the State commission. Your whole address has been on the theory that the leasing bill is an unwarranted attack on State rights, and yet in the bill you have presented you have invoked, in a very powerful way, the aid and power of the Federal Government to enforce the orders of the State.

Senator SHAFROTH. I must admit that I am making in this bill concessions with respect to interference by the Federal Government which in some respects I do not want at all; yet I feel it is impossible to get anything through Congress without some such provision. You can limit and curb that in any way you wish. I would prefer to leave the power in the utilities commissions of the States to control the matter, but we feel that we will get no legislation giving right of State to tax the property without some such restrictions; we feel that the officers of the Government will continue to withhold these power sites from entry, and this clause was put in for that reason, so as to meet the situation halfway, and give some control, which will not be as bad as that which controls the land to such an extent as to make it exempt from taxation for State purposes.

Now, if it would suit you just as well to strike out that part of the bill giving the right to forfeit, I have no objection to that. But I feel that something has to be done to meet the situation in order to get any development, and I am willing to concede and to grant that interference by the Federal Government to the extent that it is stated in that clause. As the forfeiture will have to be drawn by a court I do not believe corporations will refuse to invest in such enterprises. They ought to obey the legal orders of the State utility commissions and this is simply a power to assist in enforcing the same.

The second section provides against combinations—against large holdings. I do not know whether it is wise to limit them to 40,000 horsepower or not. That would do in my State. We have not a single plant that generates over 20,000 horsepower.

Senator ROBINSON. What would be the economic benefit of preventing the development of all of the power that could be developed, if there was a demand for it?

Senator SHAFROTH. None whatever, except the fact that there is a cry down here that corporations are seizing things and trying to get large plants for monopoly, and for that reason it is put in there in

order to make a curb on that. It is not an economic benefit, if you have regulation and control by the State that is effective, but the people are fearful that the regulation by the State will not be effective, and for that reason they want some curb upon monopoly, by the Federal Government. Personally, I have confidence in our utilities boards; I have no doubt but that they will turn out to be good, because we have the power of recall, and we have the power of initiating laws if necessary in order to impose duties upon them. There might be some little delay concerning it, but notwithstanding that, I have confidence in State control.

Senator ROBINSON. I want to ask about this next clause:

No corporation, copartnership, association, or individual can acquire, own, hold, or control any of the capital stock of any other corporation owning, leasing, holding, or controlling any water-power plant or plants.

Do you know whether that has the approval of the so-called water-power people or not?

Senator SHAFROTH. No, no. I have never consulted a water-power man about this bill at all. I expect that they would want to have the opportunity to buy other plants, and there is no question but what economically it should be done if reasonable rates were sure to be fixed by a utility commission. If they are reasonable in their charges, I have no doubt that it would be to the interest of the public that takes the electricity in the form of lower rates.

Senator ROBINSON. Under this provision could one man hold stock in three water-power companies?

Senator SHAFROTH. He could not, as to those plants that are located after the passage of this act. It does not apply to anything that has been acquired heretofore. Whatever is a vested right goes, and you can not very well, in this kind of a bill at least, control that.

Senator ROBINSON. I do not imply that suggestion by my question, but what is the advantage of that provision of denying to the investor the right where your State utilities commission regulates, as you say -and you say you have confidence in the efficiency of its regulation- -what is the advantage now of denying to the investor the right to hold stock in two water companies?

Senator SHAFROTH. I will tell you. It is only to get through a bill that will open up these plants. That is the reason -because there is a great sentiment down here in the East and throughout a good portion of the United States, and, to some extent, in the West, that corporations must be curbed. If the people had an absolute surety that the State utilities commission would fix reasonable rates, they would not care for this, but they are afraid that they would not fix reasonable rates.

Senator THOMAS. In other words, this is a concession to the public opinion as to the efficiency of the commission?

Senator SHAFROTH. Yes, sir.

Senator THOMAS. You are compromising against your own conviction?

Senator SHAFROTH. Yes, sir; I am confident that the public utilities commission will control and will make fair rates for the buying public, in the way of charges for service.

Senator ROBINSON. As a matter of fact, now, that provision is hardly practical, is it, Senator? I am not familiar with the practical workings of these companies, but is it a practical provision to deny

one individual the right to hold stock in more than one water-power plant?

Senator THOMAS. Not if he has a wife and children.

Senator SHAFROTH. Well, we are doing that in these antitrust bills that we have just been passing. We have provisions against interlocking directors, and that is just exactly what we have here.

Senator CLARK. Have you anything in the antitrust bills that prohibits a man from holding stock in two or more corporations?

Senator SHAFROTH. I think so. I think that is in the antitrust bill that was passed.

Senator ROBINSON. Those provisions apply only, in the antitrust law, to corporations engaged in interstate commerce. I do not think we have any such provisions relating to stockholding.

Senator SHAFROTH. It relates to stockholding in companies engaged in interstate commerce.

Senator CLARK. Is that in the antitrust law?

Senator SHAFROTH. Oh, yes.

Senator CLARK. Is it possible that we have passed a law here that would prevent any man owning stock in two or more companies?

Senator SHAFROTH. In competing companies.

Senator ROBINSON. That is for the purpose of preventing monopolies to defeat competition and is a very different principle from this.

Senator SHAFROTH. All these companies producing electricity or buying it in the market and selling their product are naturally competing companies.

Senator CLARK. This goes to the extent of saying that a man shall not own stock in a water-power company in Utah who owns stock in a water-power company in the State of Washington, where there is no possibility of competition.

Senator SHAFROTH. That depends. You can transmit electricity as far as 600 miles, as I understand.

Senator CLARK. You could hardly transmit electricity 600 miles and compete with a company that generated the electricity right there on the ground.

Senator SHAFROTH. If this were an absolute prohibition, it might be unworkable, because plants break down and people have to be supplied with electricity during the breakdown, but I have a provision in the bill which saves that to the extent that without the written consent of the Secretary of the Interior those things can not be done, but the Secretary of the Interior may permit these combinations, if needed. It is simply another curb, and that is all.

Senator ROBINSON. That is only in a case where the ownership is acquired by descent, will, judgment, or decree?

Senator SHAFROTH. Oh, no.

Senator Clark. He is speaking about another section.

Senator SHAFROTH. "That no corporation, copartnership, association, or individual, without the written consent of the Secretary of the Interior, shall, directly or indirectly, acquire, lease, control, hold, or own at any one time water-power plants hereafter located upon public lands with capacity in the aggregate of more than 40,000 horsepower."

Senator ROBINSON. Oh, yes. I was looking at another provision

Senator SHAFROTH. Yes; you were looking at the other provision which also gives the Secretary of the Interior discretion.

The third section is one that provides a penalty for violation of this provision, against either the directors or the corporation owning other companies that are engaged in the same business.

Senator ROBINSON. Well, sections 2 and 3 are in reality antitrust sections, are they not?

Senator SHAFROTH. Yes; they are practically antitrust sections. While I dislike very much to have the Federal Government maintain control over State affairs and over enterprises that are within the limits of a State, yet I feel that in order to get any development legislation through Congress we have to agree to some such a clause, and such a provision as that is infinitely better in my judgment than to have the Government take possession of the property, keep it in perpetual ownership, and deprive the State of the means of taxation upon it, thereby attacking the very sovereignty of the State itself, namely, the right to exist.

Senator THOMAS. Senator Shafroth, let me ask you right there, would not a transfer by the Government to the respective States of the public domain within the boundaries of those States under conditions, the nonobservance of which would result in forfeiture, be a better solution of this entire question than any or all of these various schemes of control, of leases, and of supervision with which the records of the Senate and of the House of Representatives are now burdened?

Senator SHAFROTH. Well, in answer to that I will say that it is far better than any leasing proposition, but if we can restore the right of entry to these lands so as to establish individual ownership, subject to taxation, and then have the matter of control under a public utilities commission of the State, I think it would be better than even State ownership.

Senator THOMAS. Of course my question assumes the existence in the State of these public utilities commissions or bodies armed with authority to regulate and control. Personally I think the experience of the State of Texas in the administration of its public lands is quite creditable, even much more so than the administration of the Federal Government of its public domain. What I shrink from more than anything else in matters of this kind is the enormous addition to the present civil service of inspectors, agents, supervisors, detectives, rangers, and other employees of a centralized Government thousands of miles away coming in daily contact with and necessarily irritating the citizenship of the West. I see in them the enormous expense which is added to the permanent expenditures of the Government which, instead of producing satisfactory service, increase the existing feeling in the West.

Senator CLARK. Speaking of the expense, Senator, do you know whether there has been any report made as to the receipts and disbursements of the Interior Department in the last 20 years on account of the administration of the Government lands. In other words, has the Government received, in the sale of coal or other lands, or as fees or as payments on commuted homesteads, sufficient money to equal the cost of administration? Do you know, or do you not?

Senator THOMAS. I have no knowledge of such a report, but I would not be surprised if from the report that we have it is learned that the cost of administration of the Forest Service, as compared with the receipts, would show that the expenses exceeded the income

by a large amount. Of course we know that in the adminstration of the Forest Service the expenditures are very largely in excess of the income.

Senator CLARK. If that were true, it would leave the Government public domain a charge upon the Government rather than an asset.

Senator THOMAS. I think it would.

Senator CLARK. The attitude of a great many promoters of the present conservation policies, and the present attitude of the Interior Department in regard to the public lands, is that the public lands are the property of all the people, therefore the people in the East should share in the profit to be derived from them as well as the people in the States in which the lands are situated.

Senator THOMAS. Certainly. That could be arranged by detail. That is to say, when the State sold a piece of land, 50 per cent could be paid to the Federal Government. With the advent of the so-called conservation policies, under the administration of President Roosevelt, and as a necessary result of that policy, the large number of men and women engaged in the civil service loomed up. In other words, the civil service was increased in its membership under the adminstration of President Roosevelt, and largely because of these policies, by 100 per cent. I think if the entire domain is to come under the supervision of the General Government, which is to occupy the attitude of a gigantic landlord, and all of these agents everywhere looking after its lands, that it will result in another bureau and agents and inspectors, and will increase the expense, to say nothing of the irritation which these things necessarily produce in the mind of every American citizen.

Senator CLARK. Personally I have no doubt at all but what if the Government should pass all the lands to the State, they would be passing a liability and not an asset.

Senator THOMAS. I think so.

Senator CLARK. I think the administration of the public lands of the United States now is and always will be a financial liability rather than a financial asset.

Senator THOMAS. The old leasing system or policy of the Government, as Senator Shafroth has shown in a recent speech in the Senate, was a distinct failure, and as such, was abandoned.

Senator SHAFROTH. There was an expenditure of $4 to every dollar collected.

I think that the suggestion of the Senator from Colorado would never be considered in the East as at all advisable for the disposition of these public lands. The sentiment here and in a large portion of the United States is so strong against the proposition that the lands should be turned over to the States that I do not see any chance of relieving the situation out West by legislation of that character.

Senator THOMAS. Yet there is not a State east of the Mississippi River but which if the Government had perpetually excepted one-third of its domain from taxation would feel just as the people of the Western States do upon this subject.

Senator SHAFROTH. Why, they felt that way as to the leasing of those lead mines, and resolutions were passed by legislatures showing the iniquity of the law, and the governor of Illinois went to the extent of telling the people to refuse to pay a dollar of royalty to the Federal Government imposed by that leasing system; he regarded that those

lands were held by the National Government in trust for the people who were to use them and not for the purpose of securing revenue for the National Government.

I think sentiment is very largely crystalized, however, against State ownership. Whether that be true or not, there are some reasons for that sentiment. But State ownership is infinitely better in my judgment than any leasing system which might be imposed by the Federal Government upon the people of the West.

As to expenditures, I am satisfied we will have expenditures so gigantic in the administration of a leasing system as will make it never pay a cent. The experiences we have had demonstrate that.

Senator THOMAS. The expenses of administration of the Forestry Bureau are not considered at all in the matter of division. They divide the receipts with the States arbitrarily, and charge expenses to the general account.

Senator SHAFROTH. Yes, but while that is all true, you take the total receipts that are paid in, and they do not equal half as much as the appropriations for the Forestry Service.

Senator THOMAS. I agree with that.

Senator SHAFROTH. I mean before the division. They keep an account of the amounts they receive from the people.

Senator THOMAS. And the division is made arbitrarily.

Senator SHAFROTH. Arbitrarily, and yet the amount which the Government pays is twice that, and if you take also the 25 per cent that goes to the State for school purposes, and 10 per cent for road purposes, it makes the disparagement still greater.

Senator CLARK. Is it not also true, Senator, that, taking the Forest Service, which is the only one we have to use as a basis, the charges upon the citizens of the State have increased tremendously?

Senator SHAFROTH. As high as 700 per cent in some sections of the United States. They have endeavored to make the system pay. Mr. Pinchot, when he started out, thought it would pay. I heard Senator Clark in a conservation convention that was held in Denver recite the fact of some official capitalizing the resources of the West and determining that it would pay a large amount on a 5 per cent basis. They expected it to pay, but it never has paid, nor even come within half the amount sufficient to pay. Yesterday the Committee on Appropriations had a statement from the Agricultural Department notwithstanding we had appropriated $5,299,000 for the Forest Service, that it was necessary, as a deficiency, for them to spend $349,000 more, and it was allowed.

Senator THOMAS. What committee was that?

Senator SHAFROTH. The Committee on Appropriations.

Senator THOMAS. The Senate Committee?

Senator SHAFROTH. The Senate Committee on Appropriations.

That bill has already passed the House and is in the Senate. These expenditures are almost interminable for the national forests. You will find they exist in almost everything the Government undertakes of that nature in the West when administrative officers are brought from the East in order to control the affairs out there. I can not account for it, except by the fact that there is not that economy that there should be, and then again the fact that they are in a business which can not possibly pay.

Now, I want to say just a few words as to section 4.

Section 4 is a provision which copies the law for Alaska against combinations of coal companies in restraint of trade, for the purpose of preventing monopoly. It is copied almost word for word, except it is made to apply to water powers. It was first enacted as to the coal lands in Alaska, and it is very comprehensive and applies to any combination for the purpose of raising prices.

Senator STERLING. That is your section 4?

Senator SHAFROTH. Yes; section 4 of my bill. I copied that because it has stood on the statute books for six or eight years, and I have known of no attack upon it.

Section 5 is the section which repeals that provision of the act which gave the Secretary of the Interior power to revoke permits. Everybody concedes that is wrong, that no company will ever invest a dollar when upon tomorrow morning they may wake up and find that without any cause whatever their investment is nil. Yet when that was passed the fact was cited that our national banks can have their charters repealed at any time, and the Government never does it, and that in the District of Columbia every one of these franchises for the street railways, have clauses in them that you can repeal, modify, or amend without any right of action against the Government, and they said, "That has been operating, and very satisfactorily." But after that was passed Secretary Garfield revoked 40 permits two days before he went out of office, and it startled the entire water-power people of the United States into realization of the insecurity of their investments. He no doubt thought he was curbing monopoly, and had a good purpose in doing it, but he did not foresee the consequent stagnation that must necessarily follow in the development of that resource of this country.

It seems to me that the first section and the last section alone would make a workable bill, even if the others were left out. The others were put in for the purpose of letting people understand that we do not care anything about these water companies for themselves, that we are not wanting them to make one dollar out of the people that they are not entitled to, and to show that we are willing to guard against monopoly, and I think the provision should stand.

I want to say a few words as to the conflict of jurisdiction between the United States Government and the State government in the administration of water-power plants, if a leasing bill should be enacted.

The State, as I have shown by the decision in the case of Kansas *v.* Colorado, has at least the control of the waters of a State, with the possible exception of where water ——

Senator THOMAS (interposing). You mean by that that the Supreme Court has so decided?

Senator SHAFROTH. Yes.

Senator THOMAS. My experience is that that opinion is not followed very closely by the administrative officers in the administration of the land laws.

Senator SHAFROTH. Well, I expect that is true, but nevertheless ultimately the Supreme Court opinion would prevail.

Senator THOMAS. I have been told—I do not vouch for its truth—that Mr. Pinchot, before the House Committee on Public Lands

Senator WORKS. That may be. I think a man would be very foolish to do it.

Senator SHAFROTH. Another proposition comes in there. Suppose the Government of the United States permits the construction of a reservoir for the purpose of creating power, and that water becomes necessary for domestic use in some city. Under our State constitution we have a right to condemn that water. But you can not condemn something that the Government of the United States has control of on Government land and uses as an instrumentality in carrying out its laws. If the Government itself acquired it, you would have a conflict there. Those higher uses of the water which exist under State laws and under State constitutions would be absolutely annulled by reason of the fact that we have not the power to sue the United States and make its water in reservoirs subject to the State law.

Then, again, we have in our State, as you know, certain laws in regard to the construction of dams and reservoirs. You have to begin them within a certain length of time, you have to erect them with diligence, and you have to complete them within a certain time. The Federal Government never has completed anything within the time allowed by our State. Suppose they were erecting a dam, and five years elapses without its being completed, and by reason of that it loses its water right; what law is going to prevail? Is it possible that the officers of the National Government will say, "Well, we have started this enterprise, and it takes us about 10 years, usually, to complete a project"—and that is about what it takes—"and we are going through with it." Take one plant we have in our State, turning the Gunnison River into Uncompahgre Valley, as an example. They started that in 1903, and it is not yet fully completed, I understand.

Senator CLARK. At the time that was begun when was it estimated that it would be completed, Senator?

Senator SHAFROTH. I do not know what the estimate was, but delays have occurred, and delays will occur, and you can not have action by the Federal Government in quick time.

Senator THOMAS. It is only fair to say that one of the great delays there was consequent upon their encountering a mass of soft material not expected in a hard, mountainous country.

Senator SHAFROTH. I am not blaming the Federal Government on account of the matter, but I am showing this, that here is a certain law in the State of Colorado that provides limitations upon the construction of these reservoirs, and it is proper that it should be so, because if you do not have such provisions people would hold these sites for the purpose of speculation; but if you have the National Government and the State Government both trying to regulate those things, there is bound to be conflicts. You can not bring a suit against the United States Government, and seizure there may produce a confiscation of the rights of the State. At least disputes between the State and National Governments under such conditions are sure to arise, and it seems to me we ought to avoid them.

There is no question but that the State has the right to condemn a dam, and it should condemn it whenever a reservoir is unsafe and endangers the lives of people who live below it. The condemnation of the dam of a company leasing from the Government will in all likelihood not be submitted to by the Government. Why establish

a new system of double jurisdiction when we have a simple, plain State remedy that has proven good for years and years, under which reservoirs have been constructed without the slightest interference by the Federal Government or anyone else? We have an enormous number of reservoirs in the State of Colorado. I expect there are 500 reservoirs in the State of Colorado, if not more. They have been constructed under the existing law. The water commissioners of the various counties have turned out this water for use; the State law has regulated where it should be applied; there is no trouble about it, and everybody submits to it; but when you put the National Government into the leasing business and attempt to exercise the authority by the Federal Government you create a conflict between the State and Nation that ought to be avoided.

Now, gentlemen, I have detained you too long, but I just want to say, in conclusion, that whenever you hold in perpetuity lands in Federal ownership you are doing a wrong to the State; you are absolutely annulling the power which is supposed to be inherent in the State to tax every foot of ground within its borders except that which the State by express legislative act provides shall be exempt from taxation. Nearly every one of the Western States has a majority of Federal lands in its borders with relation to which it is bound to administer laws and bound to exercise control and power over. Inasmuch as taxes, together with reasonable interest upon each yearly payment, in 30 years equals the value of the land taxed, you can see that to compel the States to maintain government over these great Federal reserves and Federal-owned lands is simply to make the people of those States pay for those lands every 30 years without ever getting title to the same; and when you consider the fact that the States must have money to run their State and county government and the public-school system, which is as important to Federal citizenship as it is to State citizenship, it seems to me that there ought to be no thought of keeping in the Federal Government title to land which will deprive the State of that inherent power of sovereignty—the right to tax all of the lands within its borders.

I thank you, gentlemen.

The CHAIRMAN. Gentlemen, Senator Jones and Mr. Mondell have agreed both to be present and address the committee to-morrow morning at 10 o'clock, one immediately following the other.

We will adjourn until 10 o'clock to-morrow morning.

(At 12.30 o'clock p. m. the committee adjourned to Thursday, December 31, 1914, at 10 o'clock a. m.)

WATER-POWER BILL.

THURSDAY, DECEMBER 31, 1914.

UNITED STATES SENATE,
COMMITTEE ON PUBLIC LANDS,
Washington, D. C.

The committee met at 10 o'clock a. m., pursuant to adjournment.

Present: Senators Myers (chairman), Thomas, Robinson, Chamberlain, Smoot, Clark, Works, and Sterling.

Senator WORKS. Mr. Chairman, I have introduced a bill on this subject that I expected to ask the committee to consider, and I should like to have it printed in the record of the hearings.

The CHAIRMAN. All right, Senator Works; just hand it to the reporter.

(The bill referred to is as follows:)

A BILL To provide for the disposition of the public lands for the supply of water for irrigation and the generation of power.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, subject to the limitation and provisions in this act contained, the right of way is hereby granted to construct, develop, maintain, and operate all necessary or convenient dams, reservoirs, canals, conduits, pipe lines, tunnels, transmission lines, roads, power houses, and all other works or structures necessary or convenient for the appropriation and beneficial use of water and the power or other products generated thereby and for the utilization and beneficial use of the same on, over, under, and across any part of the public lands of the United States (including Alaska), reserved or unreserved, including national forests, national monuments, and Indian reservations, to any State or municipal subdivision thereof, or to any mutual or public-service corporation organized for the purpose, or to any person or persons authorized by the State or States in which any portion of such works, structures, or appurtenances are situated: *Provided*, That as to any such rights or uses that are located within any national monuments or Indian reservations the same shall be located subject to the approval of and under the direction of the Secretary of the Interior, and in such a way as not to interfere with said national monuments or Indian reservations or the uses or purposes for which the same are created.

SEC. 2. That any applicant for a grant hereunder may file with the Secretary of the Interior, or of the department having jurisdiction of such lands, proof of his right to the appropriation or use of water, together with plans and specifications for such works, together with such maps and drawings of the proposed canals, works, reservoirs, and other structures as may be required for the full understanding of the same, which plans and specifications and drawings shall be approved by the Secretary, subject to the laws of the State with respect to and controlling the appropriation and beneficial use of water for the purposes for which the same is being appropriated. If said proposed canals, works, reservoirs, or other structures are located within any national monument or Indian reservation, no work upon or in connection therewith shall be commenced or proceeded with until the location of the same is approved by the Secretary of the department having jurisdiction thereof, as hereinbefore in this act provided, and, if within a forest reserve, may be required to be so located as not unnecessarily to interfere with the purposes for which such reserve is created: *Provided*, That no grant shall be made under this act until the applicant shall have obtained and filed with the officer to whom the application is made a certificate from the State board, commission, or other body or officer having jurisdiction over the use of the waters of the streams of the State that such applicant has the lawful right to divert and

use the water for the purpose or purposes for which the application is made. If no such body or officer exists in any State, then the officer to whom such application is made shall, in case of conflict, make the grant to the person having the legal right to the use of the water: *Provided further*, That within ninety days after the approval of such plans, specifications, and drawings said grantee and said Secretary shall agree upon the then fair market value of the lands proposed to be occupied or used and which are owned or controlled by the United States; and, in the event of their failure to agree within such time, then such grantee shall have the right to and may bring proceedings in the district court of the United States for the district in which such lands are situated, or in which any part thereof may be located, for the purpose of determining the then fair market value thereof. Such district court is hereby given jurisdiction of such proceedings for such purpose and service of process may be had on the clerk of said court, and, upon service being made and within thirty days thereafter, the Attorney General of the United States shall enter his appearance for the United States. Such proceedings shall be conducted according to the laws and rules in force in such jurisdiction at such time for the exercise of the right of eminent domain for public purposes, with the right of appeal as in other cases. Upon an agreement being reached as to the fair market value of said land between said Secretary and the grantee, or, in the event of failure so to agree, then upon the bringing of such action in said court of the United States and upon the giving of a sufficient bond by the grantee, required and conditioned upon his complying with the order and judgment of the court and approved by the court, or upon the final adjudication of the value of said land, the grantee shall have the right to occupy the same for the purposes above set forth so long as and during such period or periods of time thereafter as the said grantee, its successors or assigns, shall be possessed of the right of appropriation and beneficial use of the waters appropriated and used in connection with said rights of way: *And provided further*, That if, and whenever, the right of appropriation and beneficial use of said waters and the right to use and enjoy the products thereof shall be assigned, transferred, conveyed, forfeited to, or vested in any other corporation or person or State or municipal subdivision thereof, then and thereupon the rights of way and all of the rights and privileges hereby granted to the grantee shall belong to and shall be vested in such successor in interest or right of the grantee or its successors or assigns, so that said right of way shall continue with, appertain to, and shall be used and enjoyed only by the grantee or its successors in interest, or in any State or municipal subdivision thereof having the right or being charged with the duty of appropriation and beneficial use of the waters diverted and used in connection with the rights of way so granted, and having the right to engage in and being charged with the duty of carrying on the service connected with the appropriation and beneficial use of said water or the electric power or products generated thereby or produced therefrom.

SEC. 3. That in arriving at the fair market value of such land the parties, or, in case of disagreement, the court, shall take into account the enhanced value of said land for power plant or reservoir or other special purpose or purposes.

SEC. 4. That in the event of the acquisition of the property of the grantee, including or connected with the rights and privileges obtained under this act, under the authority of the United States, or by or under the authority of any State or municipal subdivision thereof, the grantee shall not be entitled to claim or receive any compensation or value or in connection with any of the rights obtained or used under the provisions of this act. And the grantee and its successors in interest shall not be entitled, in the fixing of any rates by competent public authority, or by any State or legal subdivision thereof, to have or receive any allowance or earnings on account of any of the rights, uses, or privileges granted or received under this act, except such amounts, if any, as have been paid for the uses and privileges hereby granted and allowed.

SEC. 5. That the grantee shall commence the construction of the proposed works within one year from the date of the agreement of final adjudication, or the approval of the bond, as in this act provided for, and shall thereafter, in good faith, continuously and with due diligence prosecute such construction, and shall within the further term of five years complete and put in commercial operation such development or such substantial part or portion thereof, as the public needs shall demand, and shall complete and put in operation said entire development with due and reasonable diligence: *Provided*, That the rights of such grantee, its successors or assigns, shall not be forfeited or terminated so long as the grantee, its successors or assigns, remain vested with the right or duty to appropriate and beneficially use the waters or products thereof to be appropriated and used upon or in connection with said rights of way and shall be duly and reasonably exercising that right and duty: *Provided, however*, That whenever the rights of the grantee, its successors or assigns, are lost, forfeited, or transferred so that the water or the products thereof can not be appropriated or used upon or in connection

with said rights of way, then and thereupon such rights of way or the parts or portions thereof which can not be so used or enjoyed shall revert to and be revested in the Government of the United States, or in the successor in interest of the said grantee entitled to and having the right to appropriate or beneficially use said waters or the products thereof: *Provided further*, That whenever the right to use the waters of the stream for the purposes of the grant shall be forfeited or otherwise terminated by the State wherein the land is situated or by final adjudication of the courts, then all the rights under the grant shall cease and terminate and the land revert to the United States.

SEC. 6. That the rates and service of the grantee, its successors and assigns, shall be subject to regulation and control under the Constitution and laws of the United States and under the constitution and laws of the State or States within which the same are situated or used, and, in the event of forfeiture of any of the rights, privileges, or properties of the grantee, its successors or assigns, by reason or on account of the violation of any law of the United States or of any State, the rights hereby granted shall be forfeited therewith and shall revert to or be vested in the State or States, or municipal subdivisions thereof, or corporations or person or persons in whom the right or duty of appropriation and beneficial use of said waters or the products thereof shall be vested, and, in such event, without compensation to the grantee, its successors or assigns, for or in connection with any of the rights, uses, or privileges obtained, granted, or received under this act.

SEC. 7. That rates and charges for power, or water furnished for irrigation or other use, shall be fixed and determined by the State in which the same is supplied: *Provided*, That where the power plant or reservoir site acquired under this act is in one State and power or water is supplied in another State any person supplied therewith in the latter State may apply to the Interstate Commerce Commission, or other body authorized by act of Congress, to fix such rates and charges for power or water supplied in such State.

SEC. 8. That any qualified grantee or grantees under the terms of this act engaged in the appropriation and beneficial use of water or the products thereof, as in this act set forth under revocable permits or otherwise, may come under and avail themselves of the privileges of this act upon application to the head of the department having jurisdiction of the administration of this act, and upon such application and the filing of the required plans, specifications, maps, and other data required such qualified grantee shall come under and have and enjoy and be subject to all of the terms, rights, grants, conditions, limitations, and provisions of this act, upon compliance with its terms, as herein provided: *Provided*, That if any of its works or structures are in course of construction, or completion, at the time of so coming under the provisions of this act, the same shall be considered completed, used, operated, and enjoyed wholly under and in accordance with the terms and provisions and limitations of this act and as though originally authorized, granted, and constructed hereunder, and such grantee shall and may have the value of the rights and properties used and enjoyed under the terms of this act agreed upon or adjudicated and valued as in this act provided, and thereafter shall make payments to the Government of the United States in accordance with the terms of this act: *Provided, also*, That in the event of the rights and privileges of the grantee in connection with any existing uses or permits being brought under this act, thereupon and in connection therewith all of the other existing permits, rights, privileges, or claims of the grantee as to the rights and property so brought under this act shall be surrendered, canceled, nullified, and at an end, and the sole rights of the United States and the grantee as to such property shall be under and in accordance with this act.

SEC. 9. That the Secretary of the Interior, or other Secretary having jurisdiction and control over any lands subject to the provisions of this act, shall make such rules and regulations as may be necessary and appropriate and for the purposes of and having the effect of carrying out the provisions of this act.

SEC. 10. That the rights and privileges herein granted may be transferred, assigned, conveyed, mortgaged, or otherwise disposed of by the grantee, but only under and in accordance with and subject to the provisions of this act and under and in accordance with the laws of the United States and of any State or States within which such said works are situated and any assignee or successor in interest of the grantee hereunder shall be subject to all of the terms and conditions of this act and to the laws of the United States and of the State or States within which said property or works are situated in all respects and to the same extent as the original grantee hereunder.

SEC. 11. That the United States shall at all times have the right to reserve, sell, assign, lease, transfer, or otherwise dispose of all or any part of the lands or the products thereof upon, over, or in connection with which the rights, privileges, structures, and uses hereunder provided for are situated, subject to all of the rights of way, uses,

occupancies, and privileges hereunder granted, including the right to all necessary means of ingress and egress used or reasonably required in the use and enjoyment of the rights and privileges granted hereunder.

SEC. 12. That nothing in this act shall be construed as affecting or intended to affect, or to in any way interfere with the laws of the State relating to the control, appropriation, use, or distribution of water.

SEC. 13. That all acts and parts of acts inconsistent with this act are hereby repealed, and the right to alter, amend, or repeal this act is hereby expressly reserved *Provided* That in case any grantee hereunder shall, at the time of such alteration, amendment or repeal, have exercised rights in accordance with this act, such rights and property used thereunder shall be deemed property rights of such grantee, of which such grantee shall not be deprived by such alteration, amendment, or repeal, and may upon the conditions provided in this act.

Mr. SHORT. Mr. Chairman, at the conclusion of the public hearing the other day a statement of Secretary Lane was introduced, and upon conference with some of the others it was thought it might be conducive to a coordinate understanding if a statement covering the matters embraced in that was prepared, and I have done that, and without burdening the committee with presenting it, I would like to have it made a part of the record.

The CHAIRMAN. Very well; Furnish it to the stenographer.

(The statement referred to is as follows:)

TO SENATE COMMITTEE ON PUBLIC LANDS.

GENTLEMEN: Upon the conclusion of the public hearing of the pending bill in connection with the use of the public lands for the generation and the distribution of electric power, referred to as the Ferris bill, a statement was submitted by the honorable Secretary of the Interior containing his argument in favor of the passage of said Ferris bill or some amended act substantially the same. A careful reading of this article demonstrates that in many respects it is the clearest and most definite statement of the departmental view and reasons favorable to the Ferris bill that has yet been submitted.

In taking the liberty of replying to this statement by the Secretary we do so with the highest regard and greatest respect for the abilities of the Secretary and the importance and dignity of the office which he fills.

However, the contemplated legislation is recognized as not only of great immediate importance, but of still greater importance in connection with the questions of government and the Government policies involved and to be determined by the form in which this legislation is passed.

A reading of the Secretary's statement in its entirety clearly illustrates the situation that there are two prime and controlling considerations that are sought to be accomplished. While there may be other reasons and considerations, they are either directly or indirectly included in the two prime objects, which may be stated as follows:

First. It is desired that the available water powers shall be developed wherever needed and to their highest capacity and greatest efficiency; and,

Second. That wherever the public service and interest is involved the service shall be so controlled and regulated that the public shall receive such service subject to adequate and efficient regulation, to the end that the rates established shall be as reasonable and moderate as the circumstances will permit, and the service shall be of a permanent and satisfactory character.

Subject to these controlling considerations, the further considerations have been suggested and are in a degree involved, which may be stated as follows:

(1) That these rights on the public lands shall not be granted to or acquired by public-service corporations and obtained either for nothing or at nominal cost and then controlled and capitalized in such a way that the expense of service to the public shall be largely increased and if the property is afterwards acquired for the public service, large values may be placed upon and required to be paid by the public for such rights; and

(2) That in the event public ownership is desired, such rights and properties as are granted by the United States may be obtained for public use and by the State or its municipalities in a direct and prompt way and at no excessive expense.

And in this connection the error in the Ferris bill, as we believe, consists in part in the effort to have this include and control the right of acquisition upon stated terms of all of the other properties or connected properties of the public-service corporation and under conditions and upon terms stated in the act of Congress.

Except in so far as the proposed legislation involves the exercise of exceptional municipal governmental authority, charges, regulations, exactions, and control by the United States, there is, we confidently believe, no conflict between the interests and desires of the United States and the interests and desires of the persons or corporations seeking to develop these water powers upon or in connection with the public lands.

This being true, it is a matter of interest as well as surprise that such differences and vigorous conflicts have arisen where there is no real reason for the same or conflict of interest.

If such is the situation and if there is no real conflict of interest, it is of the highest importance that such situation be demonstrated and that a fair and workable understanding shall be reached and the public interest shall be promptly and properly recognised and an act consistent therewith shall be passed.

First. The inquiry, we think, should be addressed to the question as to whether or not the United States, through the public lands or any legislation dealing with the same, should exercise its own powers of Government control, and thus necessarily exercise them with relation to exceptional and isolated industries and not applying to or with relation to other like industries needing and requiring similar control and regulation.

In the first place, it may be asked, why should the associations and corporations developing or proposing to develop the electric water powers on the public lands be subject to exceptional control by the Federal Government and through the Department of the Interior or otherwise?

The answers to this question are many and obvious and apply, even though we assume the utmost ability, fairness, and good faith on the part of the Secretary of the Interior. In the first place, all such corporations and industries conducted by them are either now regulated or are certain to be regulated and taxed under State authority and control. This regulation and taxation will be of equal authority, equally imposed and equally enforced, except possibly in instances of interstate commerce, whether the Federal Government shall assume the right of concurrent legislation, control, and taxation or not.

It ought not to require argument that concurrent legislation from two different sources (especially where like regulations or charges are not imposed upon similar and competing industries) is necessarily an added difficulty and an added burden and precludes use, development, and successful competition and operation in comparison or connection with the industry not so regulated or charged. Without elaborating upon this point at this time, it therefore becomes of controlling importance to determine whether the United States Government can or should undertake to impose its governmental functions, regulative authority, and control in an exceptional way and in connection only with these industries developed on the public lands. In this connection, we do not here propose to enter upon a separate discussion of this most important and controlling question. The same was recently discussed by the writer before this committee (the Senate Committee on Public Lands), and in connection with this discussion a brief consisting almost entirely of citations of decisions of the Supreme Court of the United States and quotations therefrom was filed and made a part of the record.

It is sufficient here to call attention to this record and ask a careful consideration of the same, and to submit that it is settled in this country that the powers of the United States are derived and exercised entirely through and under the Constitution of the United States and must, of necessity, operate equally in each and all of the States of the Union and similarly upon all of the citizens and industries of the United States.

That the United States can not, under or in connection with the public lands, by the use or disposition thereof, enact or exact any Governmental authority or requirements that can not be enacted or exacted regardless of and separately from the public lands and in States where there are no public lands.

These principles are stated more at length in the brief referred to and we are, therefore, not elaborating them here. That the Ferris bill broadly undertakes to disregard and violate this rule of uniformity can not, we assume, be questioned. Upon the contrary, such inequality and exceptional operation of the laws of the United States upon and in connection with the industries developed on the public lands under this act appeared to be admitted upon the hearing referred to and was apparently not sought to be justified upon the theory of the right of the Government to directly exercise such Governmental functions in connection with the use or enjoyment of the public lands, but the legislation was sought to be defended upon the theory that those receiving the benefits of these uses of the public lands were, by contract, agreeing to and recognizing the power of the United States in the instances referred to.

Such a theory of bringing governmental powers into operation and effect by contract has been less attempted and is equally unsupported as is the theory of the direct exercise of powers of government through and in connection with the public lands.

If the United States has not the powers of government involved, either under the Constitution or in conjunction with the public lands, most certainly the associations or corporations entering into the so-called agreement with the Federal Government have no such powers and it would be a matter of exceptional wonder if two parties to an agreement, neither of them having or pretending to have the powers of government referred to, may agree between themselves in such a way that governmental powers and governmental authority not possessed or enjoyed by either can be created by the two of them and brought into existence.

That governmental powers of the most definite character and in numerous instances are sought to be asserted by the Ferris bill is, we submit, not open to question.

To enumerate some of these provisions, the United States Government seeks to exercise or control the following governmental functions:

First. The right to direct and control the process of eminent domain and to determine the nature and extent of valuations that may be placed upon property acquired by the State or municipalities for State or municipal uses.

Second. That the United States may acquire, own, and operate public utilities within a State upon terms, conditions, and under valuations fixed by the United States and not by the State, and this to include property not acquired from or derived under authority of the United States but from the State. In passing, it should be here noted that the right of the State not only involves the right to acquire for itself or its authorized agents the property of a citizen upon such fair and reasonable terms as it may impose, but equally to protect its citizens from the acquisition of their properties by others except upon such fair and just terms as the State itself may impose.

Third. The right to impose and collect a charge upon the products of an industry operated upon the public lands measured by the extent and product of the industry and in no manner controlled by the character or values of the lands used or devoted to the public service or other uses.

Fourth. In certain instances and in an exceptional way, to control the business and rates of a public-service corporation wholly within a State.

Fifth. To determine whether or not a public-service corporation wholly within a State may make physical connection and supply its service to a citizen or other corporation of such State.

Sixth. To determine the extent or portion of its products which a public-service corporation within a State may furnish or supply to a citizen or citizens of the State or some other corporation or public-service corporation of such State.

Seventh. To permit or refuse the right of a public-service corporation within a State to transfer its business or properties to some other citizen, association, or corporation of such State.

Eighth. To determine and decide as to whether or not a corporation operating wholly within a State may place a lien or mortgage for securing its indebtedness or bond issues upon its properties wholly within a State and which may at the time be devoted to a public service within such State.

Ninth. Generally, to determine the period of time during which a water right can be appropriated, enjoyed, or used, and also the period of time during which the public service may be enjoyed, continued, and operated, although the same and the operation thereof and the continuance of such operation may be a matter entirely within the control of the State and regulated and required by the State.

Tenth. Decide and determine whether the United States or the State or some municipal subdivision thereof shall acquire, use, and enjoy the water right and other rights of way and connected properties and engage in and continue the public service.

It will be observed that these matters are each and all matters wherein the United States Government and the lessee are not solely interested and are matters in connection with which the State and its citizens and those receiving and enjoying the public service are interested and in connection with which the State has the undeniable right and duty to regulate and control its public service and those engaged therein and those enjoying and entitled to enjoy the benefits thereof.

Eleventh. The right of the Federal Government to impose and collect a charge measured by the product of an industry and amounting to an excise tax upon that industry whether used wholly within that State or in two or more States. This, in effect, being not only an excise charge upon industry, but where used and conveyed into two or more States an equivalent to a tariff charge or tax upon commerce and the products thereof as between two States.

For instance, in actual operation and effect, there is not the slightest difference between a power-generating station conveying power to different cities and municipalities situated wholly within a State and in other instances a similar situation except that the power is transported into two or more States and the case of a coal mine similarly situated, with railroads radiating therefrom and the coal from which is conveyed over such railroads to cities and communities within the State and similarly to cities and communities in other States.

What could be said or would be said of a law that undertook to provide that railroads constructed for greater or less distances over the public lands should pay a certain rate per ton to the Federal Government for all coal transported from such a mine to the users thereof within a State and also to the users thereof in other States. The operation and effect is identical, and we think the effort to impose a charge is equally indefensible for constitutional reasons in each instance, as, first, an effort to impose an unequal excise tax upon the enjoyment of an industry under the subterfuge of the public lands and, secondly, having the effect of a tariff tax imposed upon a product conveyed from one State to another and in both instances measured not by the use of the public lands but by the product transported and conveyed. And, assuming that the transportation of electricity over wires is interstate commerce, the analogy is complete and perfect.

In view of these undeniably important and fundamental questions of constitutional law and of government, we may submit, in all fairness and reason, before legislation of this character by Congress, not heretofore attempted, should be adopted, that these great questions, as a condition precedent to such legislation, ought to be not only taken up, frankly stated, and analyzed, but applied to the situation, and opinions supporting their validity from the highest authority should be obtained; otherwise they should not be adopted.

While it is assumed that these exceptional and unusual powers will be so moderately applied and exercised that controversies and differences will be avoided, nevertheless, it ought to be realized that controversies have already arisen and the matter is being vigorously discussed, and sectional questions are already involved, and it therefore must be assumed that the passage of such sweeping and drastic legislation, conferring exceptional jurisdiction and the right equivalent to the right of taxation not heretofore exercised or attempted by the United States will be productive of direct, if not violent, conflicts of authority, and that such conflicts ought to be avoided and that such exceptional and drastic legislation ought, if adopted at all, to be adopted only after a most thorough and open-minded consideration of the constitutional and fundamental question involved, and then only if it is clear the United States has such powers and should exercise the same.

In this connection, it is assumed that the matter of imposing a charge or tax, while it is to be measured by the developed power and not by the value of the lands used, is, nevertheless, to be unimportant. In view of the reasons for this charge stated upon the hearing and in the Secretary's statement, it necessarily must be assumed that the charge will be a material one and in many instances an extremely burdensome one.

We may submit and we invite the very careful attention of the committee and the Secretary to this consideration, that the reasons assigned for the charge, except for purposes of Federal revenue, are not only insufficient but fanciful. First, it is stated that since power developments in certain instances must compete with each other and since some of them will be expensive of construction and operation and others will be comparatively inexpensive, both as to construction and operation, and since it is assumed that the less expensive one will be regulated in such a way as to allow adequate earnings upon the more expensive one, therefore, it would be proper and in the public interest to impose a charge on behalf of the Federal Government and for the use of the public lands that would take in the difference between the earnings and operation of the more expensive plant and the less expensive one.

This assumption is totally wrong, both in law and in practice. Each public utility is regulated by the State commissions and by all of the State commissions, so far as we are advised, upon the basis of its own capital investment necessarily involved in its construction, its own operation and the attendant expenses thereon and allowances in connection therewith. And it is never competent or allowable to make any allowance for what may be the requirements or investments or operating expenses of some other company; but each company must take care of itself and operate under and with respect to rates fixed by its own standard and in no manner affected by the standards of any other company.

A clear conception of this situation will make apparent how extremely unjust such a theory of charging would be to the western interests and the western people; the effect being first to take away from them and their industries and for Federal uses

unequal and very large revenues in the aggregate and compel the allowance and payment of rates upon the basis of the more expensive companies, both with respect to capital and operation, and to wholly deprive the people of these States of the benefit of the rates which would otherwise be allowed to be earned by the least expensive companies with respect to construction and operation.

This would be, in effect, taxing the inexpensive and efficient to the extent necessary to bring the efficient down to the level of the most inefficient and expensive, the difference to go to the Federal Government. What would be said of the theory of levying a Federal tax on the crops grown by the cotton growers in the black-land belt of Texas, in order that they should not be able to undersell the cotton growers in other sections of the country? What would be thought of taxing for the benefit of the Federal Government the most productive and profitable coal mines in Illinois, Pennsylvania, and West Virginia in order to increase their expenses, to the end that they should not sell cheaper coal than could be sold by the poorest and most expensive coal-mining district elsewhere? Is not the richness of the black-land cotton belt of Texas and the coal mines of Illinois, Pennsylvania, and West Virginia a natural and inherent asset of those States? Are not the great water powers of the Western States natural and inherent assets of those States and of the people? Is there any reason, legal, moral, or equitable, why the heritage of any State in the nature of its natural resources should be taken away from the people through a special Federal tax for the benefit of the State or other industries not so furtunately situated?

Other States doubtless have exceptional resources in other directions. But such resources are neither subject to regulation nor to any special tax. So that such a tax in this instance is not only wholly unjust, but, as applied to a regulated industry, is especially unjust in its direct application to the people. The question of imposing such a charge or tax by the State having the regulating and taxing power has sometimes been discussed, but not usually approved. But that such a charge should be made by the Federal Government and taken away wholly from the State and the people of a State has heretofore never been suggested, much less could any such suggestion be approved as constitutionally available or economically defensible.

This theory was advanced at the committee hearings and seriously urged to the total bewilderment and astonishment of the representatives present from the Western States, because it is wholly contrary to the law and to the facts and to the methods of handling such matters.

Especially in view of the situation that this entire subject is supposedly to be committed to the Secretary of the Interior, where the administration changes from year to year and from time to time, it can easily be realized with what apprehension those engaged in the business of developing the industries of the Western States, as well as the patrons and consumers of such companies, would view the establishment of such a policy, especially if such faulty and incorrect theories are to be applied to a subject of such fundamental importance.

It is assumed that this charge will amount to no great burden upon the industry, but it was brought out upon the hearing that even the so-called moderate charge exacted by the department where Congress has authorized no such charge at all could, in instances when in full operation where the power is practically whole, amount to a charge varying from, approximately, 5 per cent to 2 per cent upon the gross income.

Under the authority of Congress and especially in the light of the theories above stated it will be seen that the charge would in all probability, especially as applied to certain companies, amount to a very serious burden, especially when it was imposed in addition to all other forms of taxation, both State and National.

The secondary reason suggested for the imposition of such a charge based upon the production of electric power is, we submit with all respect, entirely impracticable and fanciful for two reasons; that is to say, it is suggested that a low rental will be imposed as an inducement to low rates to the consumer. In the first place the lessee is not going to fix the rates to the consumer. Those rates, both as to the maximum and the minimum, are now largely and in a very short while will be universally fixed by public authority, and the producer of electric power is not going to be allowed to charge more or less as an inducement for lower rentals or for any other consideration or reasons whatever. Further, it may be observed that, even assuming that the rental would amount to 10 per cent upon the total income of the corporation in connection with the power generated, which, of course, would be an impossibly high income tax, and no corporation could operate under it; but even assuming such a tax, no one with the business capabilities sufficient to get into the power business would reduce his total income $1 in order to get rid of a charge amounting to 10 per cent of the reduction.

So, under the law and the conditions, we had just as well look the matter fairly and squarely in the face and assume, as we must, that whatever is charged for and taken

away by the Federal Government will, in most instances as to all thereof and in all instances as to the greater part thereof, come out of the consumers and the rate payers for this electric power.

It is unanimously agreed, and the reasons therefor are very well and clearly stated in the Secretary's statement, that it is in the public interest that these water powers should be developed and shall, in so far as is reasonably possible, supplant the consumption of coal, oil, gas, and other energy-producing fuels, for the reason, primarily, that these latter commodities are exhausted and consumed, while the water powers are, unless used, totally lost and wasted, and, when used, no part of the energy-producing force is consumed or taken away.

It would seem to be quite elementary that if capital is to be induced to develop these sources of wealth, power, and energy, that the conditions that surround the same and the conduct of the same and the fixing of the rates and the period of duration and the basis upon which they may be taken over by public authority shall be in all respects equal and in no instance more burdensome, exacting, unsatisfactory or limited than are applied to other methods of producing energy and carrying on industries occupying the same relation to the public business and the public welfare.

It would be rather difficult, we think, to assign any reason why any different laws, limitations or regulations should be applied to these industries incident upon their development upon the public lands and not applied to identical industries not developed upon the public lands nor to other methods of the same development, although equally requiring regulation, control, and limitation in the public interests.

We may rest assured that this great and desirable public development will only be made and can only be made if the laws operating upon them and the charges, restrictions, and limitations imposed upon them are equal but no greater than the limitations and restrictions imposed upon like industries.

With deference but with all confidence we submit that another fundamental error is herein indulged in in assuming that the United States is the municipal authority having the power and charged with the duty to fix the term of the existence, regulate the service, or provide the terms upon which such business and properties may be acquired for the public use.

In the Secretary's statement developments in other countries and in different States in the Union are referred to, but these are of no value or importance, we submit, unless we consider and keep in mind that in each instance these industries are developed and controlled and their terms regulated and their properties are provided to be taken over by the Government, the State, or the municipal authority under which they originate and having jurisdiction to control and regulate such matters.

That the United States Government, by reason of the incidental fact that it controls certain lands needed for dam sites, reservoirs, rights of way, for canals or transmission lines or the like, therefore and by virtue thereof but not otherwise becomes the municipal authority clothed with the responsibility and vested with the authority to regulate or to have anything to do with the term of the existence of such business or the method of its regulation during its operation or the terms or conditions under which it may be acquired and taken over for the public use, has, we may submit with confidence, no foundation in law or in reason and no precedent in practice.

It is unnecessary, we assume, to pursue a subject so palpably consistent with constitutional and all other legal considerations and so uniformly confirmed by practice.

The water right and the beneficial use of the water, which is committed to the State and its laws is the essential and controlling thing and the right of way is incidental. Usually, it happens that the United States owns only an incidental part of such lands required to be used in such developments. But it is assumed that such incidental ownership first permits of governmental and municipal control and legislation, and, second, to the exclusion of all others interested in the property rights, permits the United States to become a partner in the earnings of the business upon terms dictated by itself and without much consideration of and to the exclusion of other property owners whose property may have contributed more largely to the necessities of the development than those of the United States. But the discrimination against other property owners is not the subject that we are interested in.

Even if the United States owned all of the lands necessary to the development of the water power, it would seem quite sufficiently unreasonable for it to attempt to exact control or a partnership in the profits by reason of its incidental ownership of the lands requisite to the right of way. But we are dealing here in an elementary sense neither with water rights nor lands but we are dealing with the functions of Government, the regulation and control of industry, and the assertion and exercise of jurisdiction. And when we come to these considerations there is and can be no doubt that all of these functions and duties are vested in the State and except in so far as the United States may rightfully assert its constitutional powers to regulate interstate commerce and interstate rates, the United States, by virtue of its incidental owner-

That these combinations, however, have resulted in higher rates or inferior service no informed person contends. In fact, the usual and, so far as we are informed, uniform result has been greatly improved service and lower rates and in no instance of which we are informed has there been higher rates.

Not only is this true the situation, but the States having the most efficient regulation or public service and the most capable governing boards are now adhering to the theory that where one power company is occupying and is capably and adequately serving a certain district that no other power company shall be allowed to invade the same.

And, as for instance in California, no power company is permitted to enter the field occupied by another without a certificate of public necessity and convenience, and where the existing company has or can obtain an adequate supply of power and is able to cover and thoroughly supply the district, it is universally recognized that lower rates and better service can be obtained through regulation than is possible in a district where there is a duplication of investment, power, development, transmission, distribution lines, and service.

A further and most important consideration is that the larger and better organized companies with a diversified supply and a diversified market can utilize the power developed to much better advantage and the consumption can approach the maximum production and a company so financed and so operated can offer a basis for a bond issue and security therefor that can not possibly exist in the case of a smaller company, with the result the bonds of such company can be sold much nearer par and at a lower rate of interest than would be possible in the case of numerous small companies endeavoring to cover the same field.

When it is considered that these water powers can only be successfully developed through money derived from large bond issues, widely sold, and that they can never be economically and fully developed and the people can never be economically and satisfactorily served until such bonds can be sold at par or practically at par and at a low rate of interest, it can be even better understood why the States are encouraging the development of power in large units and by companies serving extended districts.

So far as the existence of a power trust or monopoly such as was heralded in the report of the Commissioner of Corporations, issued several years ago and republished and readvertised in various forms, the absurdity of the method of showing the existence of such a trust was sufficiently illustrated by the evidence given at the public hearings of this committee.

The further consideration as to the existence of such extended power trust is that power companies can in no way compete beyond their own distributing lines. And nothing more preposterous was ever advertised in this country than the existence of a power trust covering the entire territory of the public-land States and between corporations whose power-distributing lines were hundreds of miles apart and whose business could not come in competition with each other in the slightest possible way. But in so far as if a power monopoly consists in the concentration, connected operation, distribution, and use of power in any district available to be served thereby, it is in the public interest and when, as most of them now are and all of them soon will be, adequately and intelligently controlled, the situation represents the best security for private capital invested in the public service and the largest and best possible service to the public at the least possible cost.

Referring briefly to the discussion in the Secretary's statement of the question of the compensation to be exacted by the Federal Government for these uses, we have already stated our view that these uses should be consistent with and inseparably connected with the water right and the public service and in all respects to the municipal control of the State and in no respect to that of the Federal Government, except in connection with interstate commerce developed as such; that these rights and properties should not be valued for rate-fixing purposes or when taken over by the public, if taken over for public ownership. These considerations, if accomplished, would apparently remove the inducement for any charge.

However, the question of imposing a charge, if constitutional considerations shall apply, relates to the land; not, we think, as suggested by the Secretary, either confined to the value of such lands for agricultural purposes or measured by their availability to control a water appropriation and by virtue of such control dictate terms, charges, and conditions in connection with the production of electric power.

Whatever the value of these lands may be for any purpose or use, under the laws and principles applicable to eminent domain, the Government may, if it be considered a wise policy, exact. But, as clearly illustrated in many decisions, it can not rightfully measure their value when acquired and included in the public service but only their value to the owner in connection with their acquisition for the public service

Subject to these considerations, it is submitted that the Federal Government might consistently adopt either one of two policies; either adhere to the hitherto universal policy of allowing such public uses for the public benefit without compensation or have the fair value of the lands estimated under the rules of law applicable in eminent domain and then exact compensation accordingly, which would, of course, become a charge upon the public service, but if these properties were taken over for the public service upon the same basis and measured by the same rules of valuation as are applied to other lands similarly used which have already passed from the Federal Government there could be no just complaint that either the Federal Government or the people of the State had been imposed upon.

In the Secretary's report an instance in connection with which a certain corporation valued the land acquired for its dam, reservoir site, and plant at $26,333,000, is cited.

We may hazard the suggestion without any doubt of the result that if and whenever the said land so acquired for dam site, reservoir site, and other uses is valued, it will be valued only at its fair value at the time and that no fictitious supposition or monopolistic valuation will be allowed and that the people will never be required to pay rates upon such properties or the valuation thereof in excess of their fair worth and value, regardless of any extravagant estimates or claims of any corporation.

We have already concurred in the suggestion that the United States Government should not give away lands worth millions of dollars for power sites in derogation of the rights of the general public. What the United States Government should exact, if it wishes to exact anything, is fair compensation to itself for the value of its lands and properties taken and devoted to the public service, and the people should never be taxed or charged for these lands or uses in excess of the valuations fixed and paid in connection with the acquisition of the same for the public service, and if nothing is charged then the people will get the entire benefit and advantage of the free and unhampered use of these rights and occupancies in connection with and as a part of the public service.

We have already, we think, fully covered the matters necessary to be considered in connection with the fixing of a term for these uses. We have already endeavored to make it clear that whatever terms are desired should and must be fixed by the State in connection with the acquisition and use of the water right, the continuance of the public service, and the taking over of the same for public ownership, if desired. The rights of way over and in connection with the public lands should run concurrent with and be transferable only with and perpetually and indispensably attached to the water right and equally a part of and to run with and be inseparable from the public service.

As to the measure of the valuation of property, either for the public service or on its acquisition for public ownership and operation, we have already pointed out, but here repeat, that these rules and measurements must and will come from the State and its laws and will control all of the properties, whether property can be referred to as "good will" or "franchise values" or "intangible elements," excepting only that, as already pointed out, the United States Government might well provide that the rights of way and uses and occupancies obtained through it should, as stated, be devoted to the public service and to that extent relieve the public from any additional charge on account thereof, either in the matter of rates or later acquiring the same for public ownership.

Of one thing we may be assured, if the judgment of men of experience is worth anything. If the United States Government should adhere to the provisions of the Ferris bill and should undertake to provide for the control and valuations of the properties in connection with their taking over, as is now provided in the Ferris bill, no bonds can be successfully negotiated or sold or financing be successfully carried on in connection with or under such a law.

The present laws in their conflicting provisions and uncertainties are bad enough and sufficiently interfere with financing and development. But if any law is passed in any manner resembling the provisions of the Ferris bill in the respect under consideration, if the judgment of men of experience is of any value, there can be no further developments until another and a different law takes its place.

The consideration should not be to merely make financing possible, or so that bonds can be sold at high rates of interest and at heavy discount, but if the public interest is the controlling consideration the question is, what is the basis on which bonds can be sold at the least discount and at the lowest rate of interest to the end that the water powers may be developed and the people may enjoy full developments, adequate service, and low rates. That these considerations automatically follow each other can not be successfully denied.

There are certain matters in this connection relating to certain important features of the Ferris bill that have not been here discussed but which are fully discussed in the argument of the writer referred to and which appear in the printed reports of the proceedings of this committee.

We there discussed the unconstitutional assumption that the United States might take over and operate public utilities within a State, and as the subject is of importance we refer to that discussion for a fuller statement of our views.

We also discussed the features of the bill which propose to turn over to the Secretary of the Interior the regulation of the business and rates of power companies operating on the public lands. We therein pointed out that the United States Government had no such power, and also suggested and now call attention to that argument that if it was really proposed that the United States should undertake these important functions that undoubtedly the same should not be committed to a political administrative authority, but, if undertaken at all, should be committed to the Interstate Commerce Commission or some similar nonpolitical permanent and appropriate body.

We further discussed the features of the Ferris bill in connection with requiring and allowing certain exceptions in favor of municipalities and small users, and there pointed out that upon a charge measured by the product of an industry the Congress would not be justified under the Constitution in making any such an exception, and further, that it would be unjust as between municipalities supplying their own power and other municipalities served by regulated public-service corporations. Also that it would be an unwarranted discrimination against farming communities and in favor of municipalities.

We also call attention to and emphasize the situation that in actual practice, even if it had the power, it would be quite impossible for the United States to provide proper terms of use and measures of value in taking over properties for public use or other regulations, since the respective States have a right to and in actual practice do adopt different provisions on all of these subjects and by no possibility could the terms, provisions, and regulations of an act of Congress conform to the enactments or requirements of the various States.

In conclusion, while it is very natural that the major part of the discussion at the hearings, both in the House Public Lands Committee and in the Senate committee, should have been upon questions relative to the practical effect of the proposed legislation and as to what provisions should apply to taking over the properties for public ownership we are frank to say that the Governmental phases of the question interest us far more than the commercial and business questions involved. In this connection, it should be stated and understood that one of the reasons for this is that the writer does not believe that any law ever will or can be passed on this subject that will be beneficial to the public interests until and unless it is made consistent with the functions of the State and the Federal Government, and as thus understood and applied, consistent with the rights and best interests of the people to be served.

How can a law that is doubtful as to its constitutionality and unequal and sectional in its operation ever prove a sound or satisfactory basis for financing and development? And equally, how can such a law be permanently conducive to the best interests and the best protection of the rights of the people, who, as we honestly believe, can be rightly protected and permanently benefited through their own authorized agencies and powers of Government?

Fully realizing that we have already discussed the subject at excessive length, we conclude with an earnest appeal for a frank review and a full and careful consideration of the situation for the purpose of ascertaining, first, if the constitutional, fundamental, and legal suggestions which we have made are not correct and controlling; and, second, if the matters of policy and methods of disposition which we have suggested are not very much more in the interest, not only of development and sound financing, but also in the interest of the people and for their benefit.

It has been the boast and pride of this Government that it is composed of States equal in every respect whatsoever, and that its laws operate equally upon all of its citizens in the same relations. If the Ferris bill shall pass in its present form, it can not even be pretended that these considerations are applicable or that we are living under equal laws. If such a result could be accomplished with deference to constitutional rights, we might submit to the candid consideration not only of this committee but of every member of the Senate, that the policy of unequal and exceptional laws, operating differently in different States, and differently upon different industries and different citizens, not only could not but should not be enacted or made to apply in this country.

The CHAIRMAN. We will hear from you now, Mr. Mondell, if you are ready to proceed.

STATEMENT OF HON. FRANK W. MONDELL, REPRESENTATIVE IN CONGRESS FROM THE STATE OF WYOMING.

Mr. MONDELL. Mr. Chairman and gentlemen, I wish to thank you for the opportunity you have given me of appearing before you in connection with the consideration of the water-power bill.

I discussed this measure at length, during the consideration of the measure in the House, first in a general speech covering the principles involved, and, later, with regard to the details of the legislation.

There is no denying that something needs to be done to encourage water-power development on public lands. There is no question but what it is necessary that something be done in order to make such development possible on some portions of the public lands. The question is, What should be done, and will the provisions of this bill if enacted into law, furnish the proper encouragement and opportunity?

The difficulties that confront us arise from two distinct causes: First, the water-power withdrawals; so far as the withdrawn lands are concerned, the power sites, so-called, they can not be utilized at all, as the committee knows, for the purpose of water-power develpment or for any other purpose, as they are withdrawn from all use.

A simple presidential order would remedy all that. All that is necessary to do to make available the water-power sites included in the water-power withdrawals is to restore them to the public domain. That is very simple. If that were done, however, we would still encounter the difficulties that those seeking to develop water power on the public domain have been confronted with since the passage of the right of way act of 1901. I recollect something about the passage of that act. It was a departure from our right of way statutes. Instead of giving a perpetual easement, as our other right of way statutes did, it granted a right of way subject to the will and pleasure of the Secretary of the Interior. For a time people operated under that law apparently with the idea that while the right was revocable at the pleasure of the Secretary of the Interior that right would not be exercised except in some case where it was very clear that the public good demanded it. But later it became very evident that Secretaries might exercise that authority for any reason that seemed good to them, and under that act Secretary Garfield did so in a number of cases without giving any reason for doing it. What we really need is a right of way act and not a lease act.

Some time ago I introduced a right of way bill, which is H. R. 87. It was intended to be a substitute for the right of way act of 1891 and the right of way act of 1901.

Senator SMOOT. What session, Mr. Mondell, was that introduced in?

Mr. MONDELL. It was introduced April 7, 1913; in the first session, Sixty-third Congress.

(The bill referred to is as follows:)

[H. R. 87, Sixty-third Congress, first session.]

A BILL Granting locations and rights of way for purposes of irrigation and other beneficial use of water through the public lands and reservations of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the right of way through the public lands, national forests, and reservations of the United States is hereby granted to any individual, or asso-

ciation or corporation formed for such purpose, who shall file with the Secretary of the Interior satisfactory proof of right, under the laws of the State or Territory within which the right of way sought is situated, to divert and use the water of said State or Territory from the source and for the purposes proposed, for the purpose of irrigation or any other beneficial use of water, including the development of power, for the construction, maintenance, and use of water conduits, canals, ditches, aqueducts, dams, reservoirs, transmission and telephone lines, houses, buildings, and all appurtenant structures necessary to the appropriation or beneficial use of such water or the products thereof to the extent of the ground occupied thereby and fifty feet on each side of the marginal limits thereof. Also the right to take or remove from such rights of way and lands adjacent thereto material, earth, stone, and timber necessary for the construction and maintenance of such water conduits, canals, ditches, and other structures or works authorized under this act: *Provided*, That no such right of way shall be so located as to interfere with the proper occupation by the Government of any such reservation, and all maps of locations shall be subject to the approval of the Secretary of the Interior, and the privilege herein granted shall not be construed to interfere with the control of water for irrigation and other purposes under the authority of the respective States or Territories.

SEC. 2. That any such individual, association, or corporation entitled to the benefits of this act shall, within twelve months after the location of its water conduits, canals, ditches, or any part thereof, or of other structures and works herein authorized, if the same be upon surveyed lands, and if upon unsurveyed lands within twelve months after the approval of the survey thereof by the United States, file with the register of the land office for the district within which such land is located a map of its canals, ditches, water conduits, and other structures and works herein authorized, and showing adjacent lands to be used or occupied under the provisions of this act, and upon approval thereof by the Secretary of the Interior the same shall be noted upon the plats in said office, and all such land over which such rights of way shall pass shall be disposed of subject to such right of way. Whenever any person or corporation in the construction of any water conduit, canal, ditch, or other structure or works herein authorized, injures or damages the possession of any settler or allottee, the party committing such injury shall be liable to the party injured for such injury or damage.

SEC. 3. That the provisions of this act shall apply to all water conduits, canals, ditches, or other structures or works herein authorized, heretofore or hereafter constructed, whether constructed by corporations, individuals, or associations of individuals, upon the filing of the proof certificates and maps herein provided for. Plats heretofore filed shall have the benefit of this act from the date of their filings as though filed under it: *Provided*, That if any section of water conduit, canal, or ditch shall not be completed, or lands to be used and occupied under this act are not so used and occupied, within five years after the approval of said map, the rights herein granted shall be forfeited as to any uncompleted section of said water conduit, canal, ditch or reservoir, or as to any unused or unoccupied portion of such adjacent lands, to the extent that the same is not completed at the date of the forfeiture: *Provided*, That the time for the completion of any such works or structures and the use of such lands may be extended for the additional period of not exceeding five years, in the discretion of the Secretary of the Interior. And such forfeiture, in the event of such extension, shall not take effect until expiration of the time so extended. The rights hereby granted shall be forfeited and shall ipso facto terminate and end on violation of any of the provisions hereof by any person or association or corporation receiving the benefits hereof or failure to comply with the provisions of this act, and the Secretary of the Interior is authorized to declare such forfeiture and to enforce the same.

SEC. 4. That nothing in this act shall authorize such company to occupy such right of way except for the purposes of said water conduit, canal, or ditch, or other structures and occupancies permitted hereunder, and then only so far as may be necessary for the construction, maintenance, and care thereof and the appropriation, reservoiring, and beneficial use of such waters or electric power generated thereby.

SEC. 5. That such right of way, occupation, and use as is in this act authorized is granted upon the condition that such company, its successors or assigns, shall pay to the United States Government the market value of all timber or wood cut or removed from any such right of way or reservoir site or adjacent lands at the time of cutting and before the removal thereof, and as fixed by the Secretary of the Interior, and also for all lands included within such areas or rights of way or reservoir sites, not less than $1.25 per acre nor more than $20 per acre, to be fixed by the Secretary of the Interior and paid at the time the map or maps provided in section two hereof are filed: *Provided*, That for rights of way exclusively for purposes of irrigation there shall be no charge imposed for material, earth, stone, or timber, or areas or other uses.

SEC. 6. That such rights of way and uses are granted upon the condition and subject to the reservation that at all times during the use and enjoyment thereof, and of the water so appropriated and used in connection therewith, the service and charges therefor, including all electric power generated or used in connection therewith, shall be subject to the regulation and control of the State within which the same is situated and used and subject to the fixing of the rates and charges for the use thereof by such State or under its authority.

SEC. 7. That the right of way and appurtenances hereby granted shall continue so long, and so long only, as the grantee, its successors or assigns, is and remains entitled to the appropriation and beneficial use of the water so appropriated or reservoired or used, and whenever such right to the use of such water shall cease the right of way so granted shall immediately revert to and vest in the United States, subject, however, to the prior right of the person or corporation in whom the right to such water shall have vested, and who shall be entitled to the use and enjoyment thereof, to apply for and acquire the rights of way and appurtenances so granted, needed, and used in connection with the appropriation and use of such water: *Provided also*, That if such water right is entirely lost or abandoned or forfeited, thereupon such rights of way and appurtenances so granted shall immediately revert to and vest in the United States.

SEC. 8. That any of the persons or corporations referred to in this act may construct and maintain necessary roads and trails over any of the lands referred to in this act for use in connection with the construction and operation of the works and appurtenances herein provided for, with like privileges in connection with the use of materials, earth, and stone, for the construction and maintenance thereof; and such roads and trails, when constructed, shall be subject to the free use of the grantee, successors and assigns, and also subject to the officers and agents of the Government of the United States and all persons who may desire to use the same. All lands over which said roads or trails pass shall be subject to the right of way therefor, and if disposed of, shall be disposed of subject thereto.

Mr. MONDELL. This is a general right-of-way act intended to supersede particularly the act of 1891 and the act of 1901, and to apply to rights of way for the use of water for any and all purposes. People who are not familiar with the right-of-way act of 1901 or the history of its enactment have wondered why away back in 1901 we departed from our past practice with regard to right-of-way acts and gave a revocable permit. Well, even at that early period, 13 years ago, there was, in certain quarters, a very considerable demand for legislation which would give the Federal Government very much greater control that it had theretofore over power development. In other words, there were a good many people, or a considerable number of exceedingly active and quite influential people demanding then, as now, that the Federal Government should take control of power development and, in the desire to secure some legislation on the subject, those who did not approve the revocable permit gave way and the law was passed as a concession to that sentiment.

People will say that we should not restore the power sites to the public domain, because the Federal Government then would have no control over power development except such as it secures through the act of 1901, and would not have any at all if the parties secured a fee title to the lands which they were to utilize.

There is, I think, some reason for the fear of monopoly in our power development some ground for the fear that through monopoly of the opportunities over wide areas charges may be unduly high.

Senator SMOOT. That would be only in cases where there was not a public utilities commission within the State, would it not?

Mr. MONDELL. Yes. And really the question that divides us is largely a question of regulation. It is not the only question on which there is a division of opinion, because there are, unquestionably, some people, and in Government departments particularly, who, in

rule of riparian rights. The right of the people to control any and every use of water is bottomed on the fact that the people own the water, and that the only right that anyone acquires in water is the right of user. The State representing the people as a whole, owning the water, granting the right to use it at a certain definite place for a specific purpose, it follows that the right of the State to control the use of that water, to say what the charges and conditions of use shall be, can not be successfully questioned.

If we were legislating for the New England States or Arkansas or Alabama it is possible there might be some question whether or not the people developing water power on the lands they own would be subject to the State control in all things. I do not say there is any question about it, but I am just suggesting that there might be a question, because in that territory the right of appropriation is not recognized, and therefore there is not the same State control over the use of water. Any riparian owner desiring to use waters for the purpose of developing power, so long as he utilized the water on his own land and returns it to the stream, has the right to do so and does not ask the State or the community for the right so to do. There may therefore be some question about the power of such a State or community to fully control the use of water, but in all the region to which this bill applies—where the first step to be taken, that of securing the right to use the water, must be taken in accordance with the State laws, and under the State jurisdiction and control—it follows that there is no doubt or question about the right of the State to control rates and charges and the operations of every sort and kind, and that in addition to the power of the State as a sovereign to control generally corporations within its borders. Therefore, in my opinion, the kind of legislation I have suggested may not be necessary but if there be any doubt about it in the mind of anyone, if there be any question of the right of the State and community to supervise and control, that can be readily settled by simply providing that so far as these lands now withdrawn are concerned and so far as all public lands are concerned—I do not see any objection to writing it into every patent that is issued, if it is necessary—if the lands are used for power purposes and those so using deny the right of the State to control, that denial, when proven in a court of competent jurisdiction, shall result in a forfeiture of all claim or title to the land.

The enactment of legislation of that character would, it seems to me, entirely remove any fear that those acquiring land from the United States might use that land for the development of power and deny the right of the State to control. We would still need a proper right of way act, because, in the main, people developing water power do not acquire the land according to the public-land surveys. Ordinarily there is no way in which they can legally acquire the land under the public-land laws. People seeking these rights need a right of way act, and we are confronted with the difficulty which arises out of the fact that the right of way act of 1901 simply grants a revocable permit, and those who are proposing to develop in a large way do not feel safe in proceeding under a revocable permit.

As I said a moment ago, in the bill to which I have called your attention I provide for a right of way which shall be perpetual. This was intended to take the place of our present right of way acts, par-

ticularly the two general acts which have to do with rights of way for the use of water for irrigation and for power development. This act of mine, like all of our right of way acts, is a grant of a right. It differs from the bill under consideration, which is simply a grant of power or authority to the Secretary of the Interior. My bill proposes a grant of right of way to those who comply with the conditions of the act. Those applying must show their right to divert and use water of the State at the point and for the purpose contemplated. The bill provides for payment for the lands and for timber and material taken from the public domain, except in cases of the use of water for irrigation.

An important provision of this proposed legislation is section 6:

That such rights of way and uses are granted upon the condition and subject to the reservation that at all times during the use and enjoyment thereof and of the water so appropriated and used in connection therewith the service and charges therefor, including all electric power generated or used in connection therewith, shall be subject to the regulation and control of the State within which the same is situated and used and subject to the fixing of the rates and charges for the use thereof by such State or under its authority.

And the right of way shall continue so long as the parties comply with the conditions of the grant and do not question the power of the State to control in every possible way.

Senator ROBINSON. Under that provision, where power is generated in one State and transmitted into another for use, which State would control the rate?

Mr. MONDELL. The State in which it was used.

Senator ROBINSON. Would not that be liable to create conflict where the same power company was transmitting power for use in more than one State? Suppose the people of one State should fix a rate which was very much lower than the rate which the other State should fix: might not that occur? Might not conflicts occur? This is, in effect, a delegation to the State, or a waiver of the right of Congress to regulate interstate rates, or rates as to power transmitted from one State into another, if that power exists.

Mr. MONDELL. I do not believe that electric energy passing over a State line becomes interstate commerce any more than a migratory bird does when it passes over a State line. Congress has said that the migratory bird does in such event become interstate commerce; but I am still of the opinion that it does not, and I am rather inclined to think that electric energy passing across a State line does not become interstate commerce.

Senator ROBINSON. You do not think, then, that in the exercise of this power to regulate commerce Congress has the power to regulate rates for energy transmitted from one State to another?

Mr. MONDELL. I think that Congress might do it in the way proposed in this bill.

Senator ROBINSON. But I mean in the exercise of the power to regulate commerce. That is the question I am asking.

Mr. MONDELL. I hesitate to give as good a lawyer as my friend from Arkansas an opinion on a legal question.

Senator ROBINSON. I want to get your viewpoint. It is clear from the provisions of the bill that if that power exists in Congress you waive it by the express provisions of the bill, because you say it shall be controlled by the State.

have suggested, which shall take the place of the present statute, or by amending the statute of 1901, embodying in that the section which I have read, under which the right is conditioned, as would be the patents in these other cases, on the full and complete recognition of the right of the State to control, and the thing is done.

Now, if that was done, there would be no doubt but what the people would be protected, unless we are to go on the theory that the people are not capable of protecting themselves and will not protect themselves when they have the power, and will allow themselves to be robbed - will allow themselves to be imposed upon. I do not think we can take that position. That is equivalent to denying the capacity of the people for self-government. If that is denied; if the people can not govern themselves locally, I do not believe the Federal Government, in the long run, can protect them.

So much for that. I want to take up for a few minutes some of the details of the bill, unless the committee has somebody else they desire to hear from. I hope you will let me know, as I do not want to take up more of your time than you can spare.

Senator ROBINSON. Senator Jones wants to be heard, and we want to hear him.

Senator SMOOT. Mr. Chairman, I think that you ought to give out to the Associated Press notice that the committee will begin hearings upon the leasing bill on a certain day. We ought to agree upon that date now.

(Informal discussion followed.)

Senator THOMAS. Just a moment before the speaker proceeds. I am obliged to leave at 11 o'clock, but I am coming back as soon as possible. I have an editorial from the Daily Mining and Financial Record, written by the editor, Mr. Charles J. Downey. This is a Denver publication. The editorial has reference particularly to the subject matter of the bills which we are considering, and I ask leave to insert it in the record of the proceedings. It is short, but illuminating.

The CHAIRMAN. That may be done, Senator Thomas.

(The editorial referred to is as follows:)

DENVER, *December 14, 1914*

Hon. CHARLES S. THOMAS,
United States Senator, Washington, D. C.

MY DEAR SENATOR: I should be gratified if you would present to the Public Lands Committee of the Senate the inclosed editorial utterance upon the proposed land leasing policy. It was published in the Daily Mining and Financial Record of October 7, 1914, and represents the best expression of the views which this office and myself personally hold upon the subject. It is brief and to the point.

Very sincerely,

CHAS J DOWNEY

THE AMERICAN EMPIRE.

The foundation stone of the American empire was laid in Washington yesterday when the conference committee of the two Houses of Congress agreed upon the terms of the Alaska coal-leasing bill, which will now go to the President for his inevitable signature. Neither passionate opposition nor ineffectual complaint can add grace to the acknowledgment of defeat. Accepting the will of the industrial and financial power of the East, which controls our Federal ideals, the West has nothing remaining but to reflect upon the historical significance of this revolutionary precedent, upon which essays may be written under the title of "The New Tyranny."

What is meant by this "experiment" in Federal land leasing? Simply this: A division between the system of land tenures of the older Commonwealths and the

system of land tenures of the new. As yet it affects only an outlying province of the United States, but reliance upon that pretext is so much cheap claptrap in the light of the fact that additional measures are already waiting to impose similar disabilities upon the land-tenure system of the whole West. Who knows what other proposals are to be found up the sleeves of the imperial conjurer? Arising from this division between systems of land tenure there will some day appear great social divisions of a more dramatic nature. With no claims to the gift of prophecy, but with only a knowledge of history and of the philosophy of history, we set down that prediction with as much confidence as we would announce the appearance of a dog star to-night.

When Congress shall see fit to nationalize all the productive coal lands of the United States, which means those of Pennsylvania and Illinois, as well as those of Alaska and Colorado, it will be appropriate to discuss the wisdom of governmental landlordism. So long as there is to be an old system of land tenures for the East and a new system for the West, we must decline to regard it as a fair question between reasonable men. What if the West should take the East at its own measure of economic wisdom, and join with the political leaders of the workingmen to overthrow the traditions of property in New York, Massachusetts, and Pennsylvania? There is no argument between unequals. Only free men can take counsel one of another. Disrupt the uniform economic status of neighbors and you start a feud.

In the last hours of the conference over the Alaska coal-land bill a provision which set a maximum limitation of 5 cents a ton royalty was removed, while the Secretary of the Interior was given certain discretionary powers as a substitute for mandatory duties. To one who will reflect upon the subject, it should be very clear why these things are done. They are intended to place the land tenures of the West in a precarious situation with respect to the agents of that industrial autocracy which is to dominate western affairs. If at any time, for example, it becomes necessary to the interests of the Empire to restrict the development of the West, discretionary power will be lodged where it can not be reached by statute or by the courts.

A treacherous pretext for the removal of the 5-cent limit upon royalties was that the Government must by this means be reimbursed for the construction of the Alaska railways. This reasoning is in every way analogous to the arguments of the advocates of internal improvements about the year 1820. The fathers of our modern industrial autocracy had fallen so much in love with the war-revenue measures of 1812, because of the protective quality of the import duties, that they had to find a way of spending the revenue. The historical issue of internal improvements was thus created. We find the echo of it to-day in the construction of Government railroads in Alaska. It is so necessary to protect the infant industries of Pennsylvania and New York against the development of the West that new ways must be found to spend the revenue from our public lands.

Restriction of western development is the watchword of the hypocritical conservation policy. This policy was invented as a cloak for autocratic and imperial rule. It has no defense except the dubious one that the American Empire is necessary. If this be true, let us be frank with ourselves and prepare for the dictator.

Mr. MONDELL. Mr. Chairman, I think that I have made it quite clear that in my opinion this bill is fundamentally wrong, that it does not approach the subject in a proper way. My opinion is, there is no way in which you could amend the bill to make it a proper piece of legislation touching this subject, a workable piece of legislation, or a satisfactory piece of legislation, or one that would encourage the development of water power on the public lands. But assuming that the committee may conclude to report something somewhat along the lines of this bill, I want to call attention to what the bill is as I see it.

One curious thing about this bill is—and in that respect it is different from any other legislation; that is, it is different from anything that we have ever put on the statute books heretofore, so far as I can recall—it does not anywhere confer a right or a grant or an opportunity to any American citizen. It is simply a grant of power to the Secretary of the Interior. No one, no matter what his equities might be, how good a showing he might make of his financial ability to develop, or of his good faith, could ever be sure of securing any rights under the bill. It is true that the Secretary might promulgate general regulations which would bind him to grant or to make a lease with

We must not lose sight of the conditions under which water pow- development is carried on in the country where the right of appro- priation is recognized. The only people that can utilize these rig of way or make these leases are the people who have the right fr the State to use the water. After all, the Secretary of the Inter has not the unlimited authority and control which this bill wo seem to give him. He can not have, in the nature of things. might lease a piece of ground to Bill Smith on condition that I would develop water power at that point, but if Bill Smith did have the right to use the water there would immediately be a co between Bill Smith and the man who did have the right to the of the water, and I do not know what the Federal Government, the Secretary of the Interior, under this law, in a case of that k would attempt to do.

I do not believe that under any legislation which may be ena with regard to the development of water power the Federal Gov ment should attempt to secure any considerable amount of reve It is, perhaps, proper that we depart from our past policy of charging a nominal sum or making no charge at all for certain cla of rights of way. The bill that I have referred to provides f reasonable price for the lands used and the timber taken. But bill before us evidently contemplates that these enterprises wil the course of time produce a very considerable revenue or inc to the Federal Government. Under the provisions of the bil there was any considerable amount of development, the rev might be very large, because there is no limit to the power of the S retary of the Interior to load onto these corporations and enter such charges as he sees fit, and it is not to be based on anything the Federal Government contributes to the enterprise.

It is proposed that the Federal Government shall go into a S where it has nothing but some land of but little value. There be in that State an enterprise with an investment of $10,000 That enterprise may not touch the public land except at some p where certain of its wires or one of its transmission lines runs a public land. It might run across public land only a rod over corner of a quarter section; but if the enterprise at any point tou the public domain, though otherwise it may be entirely separate fr it, the Secretary has the right to lay as much of a burden on t enterprise as though its very existence depended on the rights w the Federal Government granted. That certainly is not an equit arrangement, and the only theory on which it can be suggested that the Federal Government has, as I said a moment ago, the ri to go into the State and levy an inequitable excise tax. The ch which the Secretary of the Interior would lay upon an enterp would be based upon the power development, and he would take consideration the cost of the enterprise, or the estimated cost of The estimated cost might be more or less than the entire cost wi developed.

Senator WORKS. This bill does not proceed upon that theory, d it, Mr. Mondell? It is based on the amount of power developed it not?

Mr. MONDELL. It is based on the amount of power developed, b if we are to get the view of the Secretary of the Interior from expressions of the department officials that have been heard, th

have a theory that the charge would not be the same in every case. In fact, it might be very much greater in one case than in another. Whether that charge would be based on the cost of the development and be more in the case of a plant costing a great deal of money than in the case of one costing less, or whether the charge would be greater in case the estimated development cost per horsepower was low than in case it was high, is something that we can not determine. We can only judge what might be done by what has been said by the officials of the department. But in any event it is proposed to lay a heavy tax on western communities, based on the use of the water which belongs to the communities, and having no relation at all to what the Federal Government may contribute to the success of the enterprise. An enterprise might pay just as much which is now operating and which 100 years or 50 years or 10 years from now might need to use a small part of the public domain for a transmission line, as an enterprise that goes upon the public domain and proceeds to build its enterprise all on the public land, and through the opportunities which the Federal Government offers and contributes.

It is evidently contemplated that large sums will ultimately be secured in this way. Of course, those sums will ultimately have to be paid by the consumer. It is idle to say that the consumer will not ultimately be required to pay whatever the Federal Government receives.

Senator WORKS. One of the objections to this bill that appeals to me most strongly, Mr. Mondell, is the objection that the amount to be charged is based upon not the value of the land or the value of the use of it, but is based upon something that is furnished by the State and belongs to the State, namely, the quantity of power that is developed by the use of the water that belongs to the State.

Mr. MONDELL. There is no question but what that is one of the fundamental objections, Senator, that the Congress is assuming the right to levy a tax on water-power development in every case where in that development the public lands are used at all, and it is contemplated that charge will not be based on anything that the Federa Government contributes to the enterprise, but is based entirely on the power that the Federal Government attempts to seize by reason of the fact that somewhere along the line of development a little of the public land may be needed for the enterprise.

Senator STERLING. Your contention, Mr. Mondell, is that here the Government assumes to lease water power?

Mr. MONDELL. It does. That is what it really does.

Senator STERLING. Whereas all it has to lease is the land on which the water power may be situated?

Mr. MONDELL. That is it.

Senator WORKS. In other words, the Government is seeking to levy a tax upon the use of the water which belongs to the State.

Senator STERLING. Let me ask this now: Could we assume that all the Government has is the land and that it has the right to lease that land, but that it may regulate its charge for the land somewhat by the amount of water power developed, taking the water power developed by the use of that land as the measure for the charge for the land?

Mr. MONDELL. I do not think the Federal Government would be justified in that kind of a holdup. If a private party were to do that,

the community would condemn it as a pure holdup. A private party might go so far as to prey upon the necessities of a company seeking a right of way which was essential to a part of its development and might charge a very large price for a piece of land. In my State—I do not know how true that is of the West generally—that could not be carried to any considerable extent, because the right of eminent domain could be exercised to condemn the property. The right of eminent domain can be exercised to condemn property for all purposes in connection with any beneficial use of water. But the Federal Government unblushingly, or the Congress, rather, assumes the right to say to a $10,000,000 corporation in California, for instance, "If you cross the State line, or, remaining in the State, it is necessary to run one of your transmission lines a few rods over a piece of worthless public land, we will lay such a burden upon you as we would be justified in laying on you if we owned all the water you utilize and all of the land you occupy."

First, the fund contemplated should not be drawn from the people of the western country for any purpose.

Second, if it is to be levied, it should not be used for the purposes contemplated. The bill proposes to turn all of these receipts into the reclamation fund. If we are to depart from a system of sale of lands, or disposition of lands, which makes them taxable locally, and adopt a system of lease under which they are not taxable, we must of necessity, in order to be fair and reasonable and just to the community, provide that whatever we secure from those leases shall go to the immediate community to recompense them for their loss in taxes. The reclamation fund is serving a useful purpose and we do not want to impoverish the reclamation fund, but if we are going to take from our communities the right to tax, we are not just or fair when we, instead of giving them the amounts which we so obtain, pass it over to a fund which may be used in any State or in the far corner of the same State for the benefit of a few people; rob the community which is deprived of the taxing power for the benefit of somebody 1,000 or 500 miles away. So that that provision should be modified, no matter what the form of the legislation shall be, if there is to be any considerable income.

Of course, under a proper right-of-way act the right of way would be taxable. The people locally would still have their present opportunity of taxation.

Section 14, in my opinion, is quite a joke.

That nothing in this act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State relating to the control, appropriation, use, or distribution of water.

I suppose if legislation of this kind must be had, it is well enough to have contained in it a provision of that kind, which amounts to a declaration that Congress does not intend to do what it seems to propose to do does not expect to do what it attempts to do.

Senator WORKS. If you give full force to that section it would nullify all of the balance of the bill, practically, would it not?

Mr. MONDELL. Yes, sir; it undoubtedly would; and yet I fear that that would not be a saving clause if the bill went into effect unless the Supreme Court should hold that the entire legislation was unconstitutional.

Then the last section repeals in a general way the laws that are in conflict with it. I think it would be very difficult for anyone to determine just what that means. Clearly it would repeal a very excellent statute that we now have under which the right to use water for the development of electric energy supplemental to irrigation is granted. We should not repeal that law.

As a matter of fact, in conclusion, we should pass no legislation of this sort at all. We need first to amend our right-of-way acts, and, if it is necessary to make clear and definite and certain beyond all question the rights and powers of the localities to control in the matter of rates and charges, that can be easily done by a provision in the right-of-way act such as I have referred to, by a like provision in the act restoring the water-power withdrawals or, if deemed necessary, by such a provision carried in every public land patent.

The section of the bill which provides for the restoration to entry of the lands included in power-site withdrawals does not properly protect those who may seek to utilize such lands for agricultural purposes. Under the terms of the bill they might occupy these lands for many years and extensively improve them before they are needed for power purposes, and when so needed they would be subject to complete loss of their lands and improvements. The power company taking over such lands should be required to pay the fair value for the land and improvements, not, however, including its value as a power site. As to lands now held by settlers on power-site lands, the terms of the bill are even more unfair and inequitable. In fact, it is clear confiscation. These people acquired their rights before the lands were withdrawn, and the withdrawal act specifically preserved their rights. The bill before you proposes to give them a limited title under which their lands and improvements can be taken over on behalf of a power company at any time in the future without compensation. Whatever may be our views as to the conditions under which claimants and entrymen under the land laws may be allowed to secure in the future lands which have been withdrawn, there should be no difference of opinion as to the justice of giving those who entered in good faith lands afterwards included in a withdrawal a good title. The law does that now, and patents are being issued. We can not legally or honestly or in equity change the law in that respect.

We are told that we must have just the sort of legislation proposed in the bill which the committee is considering because, so it is said, the water-power development of the country is largely controlled by a few great corporations more or less interrelated by stock ownership or otherwise. This condition and tendency, we are told, is very menacing and threatens a monopoly and a levying of unjust and burdensome charges which can only be prevented by Federal control. Assuming for the sake of argument that the facts are as alleged with regard to the tendency to build up great enterprises in the field of hydroelectric development, that fact does not necessarily constitute a menace or a danger; it simply emphasizes the importance of public control. Furthermore, nothing in the proposed legislation would tend to check or minimize the tendency toward combination or cooperation and exchange of current among plants and enterprises. It would, in fact, have quite the opposite effect. There is nothing in the bill to prevent the Secretary of the

Interior from issuing leases to those already in the business or from leasing all of the water-power opportunities to one corporation if he saw fit so to do. He is given complete power and authority to do as he sees fit, and then, as though to encourage the Secretary in the furthering of combination and consolidation, he is given special authority so to do. He might allow combinations which public-service commissions in the States might desire to prevent, in fact would be very likely to do so with a view of securing large and economical development and use.

It would seem, therefore, that the proponents of the proposed legislation, after predicating their demand for Federal control on the danger of monopoly and combination, proceed to aid and encourage that tendency through the legislation they propose. They seem to be perfectly willing, even anxious, to have great combinations in this field provided they are under control by a Federal bureau and paying large revenues into the Federal Treasury.

There is no question as to the necessity for complete public control of the operations and charges of great hydroelectric enterprises. Such control properly belongs to the States, and rather than take it from the States the Federal Government should, in the manner I have suggested, strengthen and fortify that control in passing title and granting easements over the public land. In that way we will secure the largest development, the best service, and the lowest possible rates to consumers.

I am very much obliged to you, gentlemen.

The CHAIRMAN. Senator Jones wants to come here Saturday morning at 10 o'clock. He has other engagements, and that seems the only advisable thing to do, so that the committee will stand adjourned until 10 o'clock Saturday morning, and we will hear Senator Jones at that hour.

(At 12 o'clock noon the committee adjourned until 10 o'clock a. m., Saturday, January 2, 1915.)

WATER-POWER BILL.

SATURDAY, JANUARY 2, 1915.

UNITED STATES SENATE,
COMMITTEE ON PUBLIC LANDS,
Washington, D. C.

The committee met at 10 o'clock a. m.

Present: Senators Myers (chairman), Robinson, Smoot, Clark, Works, and Sterling.

The CHAIRMAN. Senator Jones, we will hear you now.

STATEMENT OF HON. WESLEY L. JONES, UNITED STATES SENATOR FROM THE STATE OF WASHINGTON.

Senator JONES. Mr. Chairman and gentlemen of the committee, I appreciate the courtesy which the committee has extended to me in connection with this matter, and I feel that the members of the committee are really more competent and have a greater knowledge with reference to these matters than I have. But there are some suggestions that I wanted to make to the committee and, in the hope that it might promote brevity, I have reduced to writing some of the things I have to say.

Legislation that will encourage and lead to the development of our water-power resources is of supreme importance. While it is properly a part of the administration's program, it is not a partisan question, and we should consider it entirely free from partisanship, and I am satisfied it will have such consideration from this committee.

A hasty examination of the hearings shows that the whole subject has been presented to you most fully and ably from the practical as well as the theoretical standpoint, and I can not hope to present anything new, but I may emphasize some propositions that have been advanced, and I want to refer especially, later on, to a bill which I have introduced, and which is before you for consideration.

All agree that our water powers should be developed. All agree that they should be developed primarily in the interest of the public We differ only over methods. I sometimes think that we lose sight of the interest of the public in our zeal over some particular question or controversy. I also fear that we lose sight of the interest of the local and consuming public in our anxiety for the public generally and its approval.

Considerable feeling also seems to have been developed from time to time over this proposed legislation. More or less appeals have been made to political prejudices and selfish bias. Some seem to think and assert that those who do not agree with them are moved by sinister and improper motives. They seem to have studied the question from such

an angle and with such fixed purpose that they act from a cramped perspective and are not safe guides for legislation. I may be mistaken in this, as I am sure they are mistaken in suggesting improper motives in those who take the view that I take.

The water-power question will never be solved properly through partisanship or prejudice. It will not be solved by disregarding the opinions, experience, and wishes of capital, and it will not be solved by disregarding the rights and powers of the National and State Governments. Development must come in one of two ways—through private enterprise or by public ownership. We are not prepared to have the National Government do it. We expect it to be done by private capital and individual initiative. This is the theory of all our proposed legislation.

Private capital can not be forced into this development. It must be led into it through proper encouragement. Terms fairly reasonable to it must be proposed and inducements fairly satisfactory to it must be held out to enlist its service and secure its investment. The bill which I have introduced has been thrust aside by some almost wholly upon the ground that it is satisfactory to capital or power people. This is not enough to condemn any bill. Rather should it commend it, because it would seem to solve one side of the problem, and, if the interests of the public are fully and carefully guarded, a fairly good solution is worked out.

Is the House bill satisfactory to capital? If it is not, investment will not be made, development will not be had under it, and we will have to go over this whole matter again. If capital will not invest under it, there is no use of passing it. If it is amended so as to be reasonably satisfactory to capital, if the interests of the public are protected and the rights of the National and State Governments duly regarded, I shall be glad to support it. I shall not discuss it before you except in an indirect way, because every phase of it has been fully presented. From a hasty reading of the testimony and arguments it seems that all practical water-power men who have appeared before you say that it is not a workable measure. I may be mistaken, but I do not believe that a single one of the practical men who, it has been asserted, assisted in the preparation of this measure has come before you to sustain it.

I have understood that in connection with this measure, which comes to you as a departmental measure, practical water-power men were consulted in the preparation of it, as well as experts of the department. And, as I say, I may be mistaken, but I have not found any practical man before your committee who assisted in the preparation of this departmental measure. If I am mistaken in that I would like very much to know it. It does seem to me that if practical water-power men assisted in the preparation of this measure they ought to come before this committee and point out why they think it is a workable proposition.

Senator SMOOT. I expressed the same opinion, Senator, early in the proceedings; but the department has not had any one here for the purpose of pointing out why it is a workable bill who assisted the department in preparing it.

Senator WORKS. While they asserted they had invited practical power men to take part in the consultation, there has never been any

statement made here that the result was satisfactory to the practical power men, or that they did, as a matter of fact, support it in its present form.

Senator JONES. I do not know whether the statement has been made before this committee that practical power men did assist the department in the preparation of the measure, or were consulted, but I think that statement was made in the House hearing.

The CHAIRMAN. My understanding of that, Senator Jones, is that before Secretary Lane embarked upon the project of framing a bill, he consulted with a number of practical water-power men.

Senator JONES. So I understood.

The CHAIRMAN. But when it came to formulating and getting the bill up, I do not know that they were present and taking an active part. It was only previous consultations between them and Secretary Lane. That is my understanding.

Senator JONES. I have seen the statement in the House hearings or somewhere that practical water-power men were consulted with reference to the preparation of the terms of the bill, and it was satisfactory to them, and it seemed to me some of them should come before the committee or their names should be given so the committee could call them before it if it desired to do so.

The CHAIRMAN. I have understood they were consulted before the preparation of the bill, but I do not know whether that is true or not.

Senator SMOOT. I went further than that and asked whether any man had been consulted who had actually undertaken to build a plant, or whether any man had been consulted who ever undertook to finance a project, and no one has ever appeared before the committee who had had any experience in either one of those most important steps taken in the development of a water power who assisted in drafting the bill.

Senator JONES. These practical men ought to know what this bill will do. Their views can not be entirely disregarded and spurned because of their interest in the proper solution of these questions. They have the money that will be invested, if any is invested, and I am glad that they have appeared before you in what I believe to be an honest effort to secure good legislation.

I admit that they do say that my bill is a workable bill and if it is a good bill from the standpoint of the public but little is left to be desired. If enough is taken from it and put in the Ferris bill to make the latter a workable bill, I shall be glad. No one cares under whose name the law is enacted. We want results rather than fame.

My bill was introduced early this year, prior to the introduction of the Ferris bill. It was prepared with certain objects in view. These objects are the development and use of the water-power resources of the country, the protection of the essential rights of the public in them, the encouragement of private capital to do this development, and the preservation of the rights of the National and State Governments. In considering this question we must not forget that provisions might be satisfactory to capital that we should not enact. Capital will probably be satisfied with one control and supervision, whether that be State or National, but we as legislators can not accept wholly their wishes in this respect. However desirable a certain kind of action may be, if it is not legal we can not follow it. We

must have a due regard for the Constitution and the rights and limitations of the respective sovereignties interested.

If my bill is satisfactory to capital it is not because capital prepared it, but because the bill recognizes what is necessary to induce capital to invest in these enterprises. I have been quite fully acquainted with the discussion of this question during the last 10 or 12 years, as have been the members of this committee, and when it is asserted that the water-power interests have prevented legislation, the one making this assertion shows that he does not in fact understand the fundamental issues involved in this legislation. Recognizing the legal controversies involved, I introduced a resolution in the Senate two or three years ago calling upon the Judiciary Committee to investigate and report upon these questions. The committee did not agree, but some very illuminating reports were prepared upon the various legal questions involved by a subcommittee of that committee.

Senator CLARK. I will say, Senator Jones, the Judiciary Committee spent a great deal of time on the questions propounded in your resolution.

Senator JONES. I know they did. They presented some very exhaustive opinions which were prepared by the subcommittee and submitted to the full committee, and very valuable ones, too.

My bill was prepared keeping in view these controversies and the state of the public mind and the purposes to be accomplished in its preparation. I consulted with just two men. One of them is Mr. H. J. Pierce, a practical power man, who has appeared before your committee, and the other is a gentleman of the highest character and of splendid ability, whose name I will not give because of his relations with the Interior Department. I can vouch, however, for his integrity in every way.

The bill as originally prepared was introduced and referred at my request to the Irrigation Committee of the Senate. Several meetings were held to consider it and many changes suggested. Other suggestions occurred to me from time to time and these were all embodied in the new bill which was introduced and is the bill now before you. I will say those suggestions of the Irrigation Committee were not agreed to formally by the committee, but simply appeared to be the consensus of opinion of those who were present as to what should be done.

Senator STERLING. Are those reports of the subcommittee of the Judiciary Committee to which you refer available?

Senator JONES. I think so; they have been printed, but it was two or three years ago, and whether copies can be gotten now or not I do not know.

Senator CLARK. They were all printed.

Senator JONES. Yes. I did not consult the alleged leaders of the so-called conservation movement in the preparation of the bill, simply and wholly because I knew their views, and the same were given consideration and due weight in the preparation of the measure.

Our undeveloped water-power resources are vast. I have a detailed statement showing the possibilities of development in each State in the Union. It may be that this information has already been inserted in the record. I know it has in the aggregate.

Senator CLARK. From what source or sources did you obtain that?

Senator JONES. From the Geological Survey, and if it has not already been inserted in the record by detail as to States, I would be very glad to have it placed in the record.

The CHAIRMAN. It may go in the record.

(The table referred to above is as follows:)

Table showing available water horsepower by States based on practicable maximum development without storage.

North Atlantic States:	
Maine	971,000
New Hampshire	295,000
Vermont	206,000
Massachusetts	273,000
Rhode Island	16,000
Connecticut	164,000
New York	2,037,000
New Jersey	127,000
Pennsylvania	821,000
	4,910,000
South Atlantic States:	
Delaware	13,000
Maryland	146,000
District of Columbia	13,000
Virginia	1,044,000
West Virginia	1,261,000
North Carolina	1,050,000
South Carolina	812,000
Georgia	752,000
Florida	16,000
	5,107,000
North Central States:	
Ohio	213,000
Indiana	141,000
Illinois	414,000
Michigan	352,000
Wisconsin	804,000
Minnesota	593,000
Iowa	458,000
Missouri	195,000
North Dakota	248,000
South Dakota	90,000
Nebraska	439,000
Kansas	323,000
	4,270,000
South Central States:	
Kentucky	236,000
Tennessee	913,000
Alabama	1,132,000
Mississippi	75,000
Louisiana	2,000
Arkansas	73,000
Oklahoma	250,000
Texas	661,000
	3,342,000

Western States:	
Montana	5,197,000
Idaho	3,080,000
Wyoming	1,566,000
Colorado	2,036,000
New Mexico	527,000
Arizona	2,038,000
Utah	1,561,000
Nevada	331,000
Washington	10,376,000
Oregon	7,935,000
California	9,382,000
	44,049,000
	61,678,000

Summary:

North Atlantic States	4,916,000
South Atlantic States	5,107,000
North Central States	4,270,000
South Central States	3,342,000
Western States	44,049,000

With practicable maximum storage, the total available horsepower in the United States is closely estimated at 200,000,000.

Of the above total amount, the present development in the United States is about 6,000,000 horsepower.

Senator JONES. Every year these power resources remain undeveloped sees millions of dollars' worth of our destructible resources used up. Exhaust a vein of coal and it is gone forever. Use the water in the stream one year and it comes back again the next. Using the water power conserves it and at the same time conserves our timber and coal supply by saving it for such use as might be supplied from other sources. The waste that has occurred from the tying up of water resources during the last 10 years from lack of proper legislation has been enormous. It has not, however, been without good results. A public sentiment has been created by which the public interests are far better protected now than they would have been at that time. Public-service commissions have been and are being created and competent agencies provided to protect the public. Public sentiment is awake, regulative agencies are provided, and we are now fully prepared for legislation that will bring forth good results if we act wisely. Legislation is desired that will develop these resources through private capital, that will give that capital a fair return, that will furnish power and energy to the consumers at the lowest possible rate with the very best service and without discrimination and that will have a due regard for the rights of the State and the Nation.

I do not complain, Mr. Chairman, at the delay we have had. I think it has resulted in good, and that eventually the delay will really have been beneficial, even though vast resources have been destroyed.

An efficient power plant generally requires the expenditure of a large sum of money. It must be extended almost indefinitely. Investment can not be secured except upon a fixed tenure and upon reasonably certain terms. Congress should fix the term of any grant that may be made and declare when it may be terminated. These questions are of too great importance to be left to any administrative officer or agent. My bill fixes the term at 50 years and to

continue thereafter until terminated by Congress. It can be terminated at any time, however, upon a violation of the terms of the grant, but only by the court after a trial and a determination that the terms of the grant have been violated. I fix 50 years, because that is the usual life of a corporation, and, in my judgment, a reasonable compromise between those who want a grant in perpetuity and those who want a 25-year term, with a revocable permit to be determined at the will of some administrative officer. Personally, I would prefer a grant indefinite in its term and to be terminated only for violation of the conditions of the grant. From expressions of members of the committee made during these hearings I conclude that there is practical unanimity that there should be a fixed term of 50 years, unless the grantee desires a shorter term, and this would be entirely satisfactory to me.

The heart of this controversy is the question of State or National control— —

Senator WORKS. Before you leave that question, I do not think you ought to say the committee has reached any such conclusion as that as to the 50-year term. That matter is entirely open. There have been some comments here dealing with a leasing bill leading to that conclusion, that if there is a leading bill it should be at least 50 years unless the lessee should want a shorter term. But I do not think the committee has committed itself to a leasing bill at all.

Senator JONES. I understand. I did not intend to convey that idea. I really intended to convey what Senator Works has suggested—that if a proposition of this kind is put through, the committee was favorable to a 50-year term, or a shorter term if the lessee desired. I am glad Senator Works has made that clear.

The heart of this controversy is the question of State or National control. About this phase of the question the controversy has waged for many years, and this has been the real cause of the delay in securing efficient legislation. There now seems to be practical accord in the conclusion that the States should control in the development and distribution of intrastate traffic and that the United States should control in interstate traffic. If this conclusion were accepted by all and legislation framed clearly along these lines, there would be no difficulty in enacting it.

There are those, however, who, while accepting nominally these conclusions, insist that the State control over intrastate business shall be supplemented by national regulation and control exercised through the levying of a tax upon the power developed and who would empower an administrative department of the Government to supervise practically all of the details of such development, whether intrastate or interstate. They insist upon giving the Secretary of the Interior authority to levy a tax upon the power developed, and also to give him power with reference to the development of the plant and supervision over stocks and bonds and mortgaging, and all that sort of thing, which means practically the exercise of a complete national governmental control over the operations of the plant. This is the practical effect of the terms and provisions of the Ferris bill.

With reference to those who claim that the Secretary of the Interior should have the right to levy a tax upon the power developed, they claim that this should be done in the interest of the consumers and the consuming public. How regulation in the interest of the con-

sumers can be accomplished by levying a tax, which the consumers must surely pay, is beyond my comprehension. I have not seen a clear and satisfactory exposition of this question presented by anyone to your committee. The purpose of the tax is clearly and concisely expressed in a letter to me by Mr. Wells, formerly of the Forest Service and Interior Department, and who appeared before your committee and submitted some valuable suggestions.

I want to call the attention of the committee to that letter, because I have looked through the hearings as carefully as I could to find out whether a clear exposition of that has been given, and I have not found it. One or two of the witnesses have started to explain it and have gotten off onto other matters, and have not made this clear. Under date of March 9, this year, Mr. Wells wrote me a letter in regard to a speech I made in reference to my bill in the Senate. He wrote as follows:

It is generally agreed by all who have carefully studied the subject: First, that water power is a natural monopoly; second, that its benefits, over and above a generous return to investors, should accrue to the public; third, that so far as possible it is better that the public should get these benefits in the form of low price for power rather than in large rentals for the public treasury—

And in all that I certainly concur—

And this may in part be accomplished by fair, intelligent, and firm regulation of prices and services by the State or local authorities.

I believe it can be fully secured in that way at least as fully secured as we can hope to secure it. Of course we can not have perfect regulation, but I believe the local authorities and public service commissions can do as well or better than any other commission—

But it can not be wholly so accomplished.

And here is the reason given clearly, now, for putting in this power to tax:

The monopoly value of a water-power site over a steam plant or of a favorably conditioned site over a less favorably conditioned one, when all are competing in the same market, can not be transferred to the public by regulation of prices and service for such regulation must treat all three competing plants alike and must stop short at a point which leaves a fair profit to the least favorably conditioned one. This means an undue profit to the more favorably conditioned plants, and this undue profit can be transferred to the public only as rental paid into the Public Treasury.

Now, according to that, the principal purpose of this tax is to make uniform the prices that the different plants must charge to the consumers, and those prices must be based upon the least efficient. In other words, they must be based upon the most expensive plant. The purpose seems to be to maintain the price at the very highest possible point and transfer the difference between the low and efficient production of energy into the Public Treasury. It seems to me there is nothing there to help the consumer out, nothing to benefit the consumer at all. As a matter of fact, it is just to the contrary. His suggestion here is that these plants must all be treated alike by the regulative agency and placed on the same basis. In one sense that is correct, and in another sense it is not correct. They must all be allowed to make a reasonable profit on their investment, but they need not all be allowed to charge the same rate to consumers. For the purpose of determining the rate to be charged the consumers, each plant is considered separately and inde-

pendently of every other plant. Under the law of the State of Washington—I have not examined the other public-service commission laws, but under the law of the State of Washington the public-service commission regulates the rates of each company upon the basis of the cost of its production, not upon the basis of the cost of production by some other company.

Senator CLARK. Of course, you do not regulate the minimum rate?

Senator JONES. In our State there is not any question of minimum and maximum. They fix the charges.

Senator CLARK. Suppose they fix the charges upon corporation A at a price which corporation B is willing to go below?

Senator JONES. They can prevent that. They can prevent unjust preferential rates.

Senator CLARK. I do not mean as a preference, but suppose it costs so much a kilowatt hour for corporation A to produce the power, and it costs 50 per cent more, in the estimation of the commission, for corporation B to produce the power; will they not allow corporation B to meet the rates which corporation A makes?

Do you get what I mean?

Senator JONES. No; I did not get your last suggestion there.

Senator CLARK. Suppose they are to get 6 per cent on the stock and in order to do that on the stock of corporation A, a certain rate is necessary, and after due consideration the commission finds that that is all right and they fix the rate at that amount.

Now, suppose corporation B can not produce power as cheaply as corporation A, and in order that they could get 6 per cent they might have to have a higher rate for their product. But suppose instead of selling power at a rate to return 6 per cent they are willing to take 4.

Senator JONES. Oh, I do not think we would prevent that. They will prevent A, the low man, coming up to B, I mean.

Senator CLARK. My question is whether they would permit the high man to come down.

Senator JONES. Oh, I think so. I have the law here and I want to read some sections directly. I think, though, if they wanted to voluntarily take something less than a reasonable profit simply in order to stay in business and not for the purpose of driving out a competitor they would permit them do it.

Senator WORKS. The result of that would be to drive out the little fellow, would it not?

Senator JONES. That would be the inevitable result, and that must be the result, and that is desirable, I think, with reference to water-power development from the very nature of it. I am going to refer to that later on. At any rate, the public should not be made to suffer because one plant is not able to produce as cheaply as another this energy that the people want. And yet, according to the statement of Mr. Wells, that seems to be the principal purpose of those advocating the giving of this power to tax to the Secretary of the Interior.

From this it will be seen that this tax seems to be intended to bring the cost of production by an efficient plant up to the level of the production by an inferior plant and take from the superior plant all

over its actual cost of production and a reasonable profit and put it into the Treasury. The consumer of the power cheaply produced by the superior plant will have to pay the price equal to that charged by the inferior plant. In other words, the result of this way of regulating is to make the consumer pay just as much for cheaply produced power as is charged for costly power. The interest of the consumer is apparently lost sight of in the desire to maintain a preconceived idea or theory and in order to assert the right of the National Government to fix a charge upon the power produced rather than upon the land used. It seems to me that the purpose should be to give the consumer the benefit of the cheap power, and if anyone should suffer because of cheap production it should be the expensive plant, not the power consumer. Professing to be solicitous for the welfare of the consumers those who insist upon this charge, it seems to me, are, in fact, placing upon them an unjust and unnecessary burden. This seems to me to be the view of those who have no pet scheme to put into operation and who have considered this question from a purely unbiased standpoint.

I have here some quotations from public-service officials who have given this phase of the matter considerable thought, which I desire to submit to the committee for its consideration. Commissioner Halford Erickson, of the Wisconsin Railroad Commission, on this point, says:

> This brings us to that feature in local regulation which often finds expression in a rental charge or a toll upon the earnings of the utility over and above the regular tax assessment. Such rental or toll is sometimes spoken of as a sort of profit-sharing plan * * * and is often pointed to as an example of wise local regulation and as something to take the place of other regulation. Closer analysis of the facts from an economical and social point of view indicates quite clearly that this toll is in effect a tax levied upon other than sound principles of taxation and that it is an unwise burden upon the service of the utility.
>
> The primary reason why franchises are granted to public utilities is to promote the welfare and comfort of the public as users of the utility service rather than the preservance of the interest of the public as taxpayers or because these utilities become a source of revenue. These propositions appear to be sound. If this is the case * * * then it follows that the operation of the utilities and the regulation of the same should also be in the interest of the taxpayers * * *. If the taxpayers and the users of the service were the same persons, and if there also was a close relation between the amount thus paid as taxes and the use made of the service, then it would make but little difference whether the toll was levied or not; but this is not often the case * * *. Tolls become as much a part of the cost of service as the taxes levied in the ordinary way. Taxes are based on the ability to pay, and this ability is measured either by the value of the property or by the income.
>
> The toll in question is levied without reference to these principles. It is placed in a lump sum upon a service where it must be borne by those who use this service in proportion to the use they make of it, whereas in the street railway field the users are largely made up of workers. This toll also falls on those who are least able to bear it.

Mr. A. H. Foote, former president of the National Tax Commission, says:

> If the purpose of those who advocate a franchise tax is to secure the best possible results for the people from the operation of the franchise granted, their proposition is unsound, because a franchise can not be taxed without adding the amount of the tax to the cost of service rendered. In exercising its reserved right to regulate rates, the State must take into consideration this tax addition to cost, as the rates it fixes or approves must cover all costs of ownership and operation and yield a reasonable profit. For this reason a tax on a franchise is not a tax on the corporation, but is a tax on on the users of the service it renders * * * It is the method of plucking feathers from a goose without exciting a perceptible squak. In fact, by reason of being inadequately informed or by being misunderstood, a franchise tax is a tax

demand made by users; or rather by political vote seekers. It is a form of indirect taxation that has no proper place in the economical policy of intelligent, honest-minded, and self-governed people.

In this respect it seems to me that the public service commissions can take care of the situation with reference to each of these various plants and they do not have to fix a general basis upon which they shall act with respect to all public utilities in a particular locality. They can take each plant and determine what is a reasonable return upon its investment and they can do it better than any other agency.

Now I have here the laws of our State. I do not know whether you have had any of these laws placed in the record or not.

Senator CLARK. Not of your State, Senator Jones, I think.

Senator JONES. Have the laws of any of the States been quoted?

Senator CLARK. Yes; I think the laws of California have been referred to.

Senator JONES. I know the laws of California have been referred to, but I did not know whether they had been quoted.

Senator CLARK. They have not been quoted.

The CHAIRMAN. The law of Oregon was put in.

Senator JONES. I do not know whether the committee would like to have any of these sections or not. Here is section 26, relative to the "duties of gas, electrical, and water companies."

The CHAIRMAN. If you have any excerpts or marked sections you want incorporated in the record, Senator, you may furnish them to the stenographer.

Senator CLARK. Senator Shafroth furnished quite a lot of them.

The CHAIRMAN. Yes. You may incorporate in the record anything you want. Just pick them out and give them to the stenographer.

Senator JONES. I have here section 26 and will read it to the committee because it is very brief. It provides:

All charges made, demanded, or received by any gas company, electrical company, or water company, for gas, electricity, or water, or for any service rendered or to be rendered in connection therewith, shall be just, fair, reasonable, and sufficient.

Every gas company, electrical company, and water company shall furnish and supply such service, instrumentalities, and facilities as shall be safe, adequate, and efficient, and in all respects just and reasonable.

All rules and regulations issued by any gas company, electrical company, or water company, affecting or pertaining to the sale or distribution of its products, shall be just and reasonable.

Every gas company, electrical company, and water company shall construct and maintain such facilities in connection with the manufacture and distribution of its product as will be efficient and safe to its employees and the public.

This defines the general power of these commissions. I will not take the time to read all of these, but will give some sections to the stenographer to be put in the record, which may be of some service to the committee.

As I suggested a moment ago, the most efficient service of water-power companies especially can be secured only through a monopoly, and only the widest possible distribution from one central plant will bring about the greatest efficiency and promote the greatest efficiency. That idea is borne out by a great many of those who have given this subject a great deal of consideration and by a great many of those ardent advocates of conservation, and I have some quotations here I want to call to the committee's attention on that particular point.

Hon. Walter L. Fisher appeared before the National Waterways Commission on November 23, 1911, and he said this:

I think hydroelectric development is essentially monopolistic and should be essentially monopolistic in its character. That is why I think is should be effectively regulated. I think they should have the advantages of the control of the market and the freedom from harassing and vexatious competition if we are going to put them under the disadvantages of effective public regulation.

And then Mr. Gifford Pinchot appeared before the National Waterways Commission on November 23, 1911, and said:

I am very strongly in favor of the consolidation of water-power plants, combining them up over large areas. * * * Better service to the community would be forthcoming if water-power companies operated over large areas. But there must be public control of their operations to prevent the benefits which come by reason of such consolidation from being translated into a general overcharge to the consumer.

Senator CLARK. Now that is directly contrary to the terms of the Ferris bill and yet Mr. Pinchot favorably considers the Ferris bill, not in toto but in detail.

Senator JONES. Yes.

Senator CLARK. I can hardly understand the change of view.

Senator JONES. That is one reason why I suggested to the committee to give thought to this suggestion here.

Then I have a quotation here from the report of the National Waterways Commission, Senate Document, 469, Sixty-second Congress, second session.

The important fact to be gathered from the entire discussion of this phase of the subject would seem to be not so much that financiers and promoters might find it to their advantage to promote a monopoly as that the economic considerations and the natural character of the business make monopoly almost inevitable and perhaps desirable when subject to strict public regulation.

Also a quotation from "The public utility of waterpowers and their governmental regulation," by M. O. Leighton, United States Geological Survey Water-Supply Paper No. 238, page 6:

Consolidation is inevitable. Water power is a natural monopoly by reason of the natural laws of stream flow. Man can not change those laws, and his only course is wisely to adapt himself to them so that they may not operate to his disadvantage. The electric transmission of power developed on water wheels has changed the entire industrial aspect of the matter. When a water power was used at the site and its industrial development was limited to its capacity there, no reason existed for consolidation; now the site of the water-power plant is not likely to be its field of operation; its power is distributed over a large area. In this large area there is a common demand for power, and the market constitutes an administrative unit. The demand of a region is demand in the aggregate. The power on any stream fluctuates with the seasons. The important power demands are those which require a certain steady supply and a large reserve for extraordinary demands or peak loads. As the demand increases with the development of the industry the cost of supplying it from a fluctuating stream grows more difficult. The energy developed on several sites or on several streams must then be transmitted to supply the market.

With a still continued increase in demand, more sites and streams must be brought into use.

In the final analysis, therefore, all sources of power available for a particular field of demand must be brought under a common administration, so that at any time the energy can be turned hither and yon to meet the requirements of each hour. It follows that regulation prohibiting power monopoly must not prevent power consolidation lest it injuriously affects industrial development. There is no virtue in preventing consolidation if economies in maintenance and operation are thereby prevented. No one will deny that water-power consolidation secures distinct and unusual economies and if the consumer receives the benefit therefrom, he is better off under a consolidation. These are oft-stated and self-evident truths, therefore the proper solution of the problem must lie in the legislative regulation of water-power development and

maintenance, to the end that the consumer shall pay a fair and reasonable price for power, consistent with the production of fair and reasonable earnings on the capital invested.

Then, I also have a quotation from an address delivered by the President of the United States to the students of the University of California in 1911, in which he said:

Public-service corporations are in a very interesting sense natural monopolies. * * * It is perfectly obvious that if other companies are allowed to compete with them there is a wasteful duplication in outlay and equipment, so that competition generally results in the eventual combination of the competing companies and the necessity to charge a price on what they supply that will pay the interest on twice as great an investment as was really necessary for the service.

The next quotation is an extract from an article by Hon. B. H. Meyer, a member of the Interstate Commerce Commission, which was published in the American political Science Review, for August 1911, at page 374:

There are few things which the industrial history of advanced nations proves more conclusively than that competition in the field of public utilities has failed to insure reasonably adequate service at reasonable rates. The public has had occasion to learn this lesson many times on a large scale. * * * Certainly we have had enough repetition of disasters to the public as well as to investors to lift this subject out of the field of controversy, but somehow these lessons have not been on a sufficiently large and overwhelming scale, for the fetish of competition is still being worshiped and the cry of competition is still raised by many as the touchstone capable of dissolving every obscure entanglement which the strained relations between the utilities and the public sometimes create.

It seems to me there should be no question with reference to this tax and how it should be levied, if it should be levied at all. The water by which the power is developed belongs to and is the property of the people of the respective States and the power when developed and used in the State is intrastate business or property. The land essential to make the development possible belongs to the Nation. The State should control and regulate the use of its property, the water, and the power developed by it. The National Government should control the use of its property, the land, and fix the price for its use. It is sought, however, to fix the value of the land of the Nation by the power developed through the property of the State. The charge is to be imposed upon the property of the State for the use of the property of the Nation and not on the value of the Nation's property itself. Surely there is no reasonable excuse for any such course and surely legislation should not be delayed or defeated by an insistence upon such an unfair course. If the Nation must have something for the use of its property, why not fix the amount by the value of its property, as any other landlord does, and not upon the value or amount of the property of some one else? My bill does this. It recognizes the title of the Nation to its lands and its right to exact something for the use of the same.

Senator STERLING. But, Senator Jones, in fixing the value of the land might not the water power to be developed on that land be taken into consideration - that is, the advantages the land would afford for the development of water power at that particular point? Would not that be a proper thing to consider?

Senator JONES. That goes to the value of the land. I have no objection to that if we have to fix a price on it at all.

Senator WORKS. In the bill I have introduced provision is made for that in express terms.

Senator JONES. Yes.

Senator WORKS. The courts in California have held in the condemnation of land for purposes of that kind, in fixing the value of the property for any specific use (for example, as a reservoir site for a power plant), the jury may take that into account in determining the actual value of the land?

Senator JONES. Yes. I have a suggestion which I will come to a little later, that my bill might be made more specific in that respect and either provide that the value of the land shall be based upon its value for general purposes or upon its value for specific purposes.

Now, as I say, if the Nation must have something for the use of its property, why not fix the amount by the value of its property as any other landlord does and not upon the value or amount of the property of some one else. My bill does this. It recognizes the title of the Nation to its lands, its right to exact something for the use of the same. This is a policy about which we may differ, but that Congress has a right to do this I will concede, and I would not delay or defeat this legislation because of a disagreement over this policy. Under my bill the grantee of these lands must pay to the Nation 5 per cent per annum upon the fair market value of its property, or two and one-half times its value during the life of the grant. If this is not enough, make it more.

Senator CLARK. You say 5 per cent upon the value of its property?

Senator JONES. Upon the land taken.

Senator CLARK. Oh, yes.

Senator JONES. The virtue in it in my judgment is its certainty. Capital will not object to the amount. You do not find the power interests objecting to the amount of the charge. They do not even object to taxing the power developed. All they ask is that you make the charge certain and definite. If you insist on taxing the power, fix the rate; make it definite and certain. Don't leave it to the uncertain and varying discretion of an administrative officer. The power people do not care what the amount may be. Why don't they object? Simply because whatever charge is made, whether upon the land or upon the power, becomes a fixed operating expense, and the consumer will have to pay it. Personally I think the use of these sites should be permitted free of charge when we make no grant except to a grantee subject to regulation and control by a public service commission. That would be wholly for the benefit of the consuming public, who have to pay whatever charges are imposed. Therefore in the interest of the public and in the interest of the consumers I would like every burden, if that is possible, taken off. Every burden you place on the development of water power must be borne eventually by the consumers of that power, and every burden of that kind that you take off is a relief to the consumers. In other words, we would benefit the people or the public by relieving them of this burden.

This is a regulated natural monopoly.

Whatever burdens we impose must be allowed to pass on to the people and instead of imposing burdens we should remove them. I suppose we can not pass legislation, however, going this far, although it is strange that we can not do so; but in my judgment if the people appreciated the effect of levying this charge they would insist in their own interest that no charge be made for the use

of these lands, the title, of course, being reserved to the Government. Now, here is what I referred to a moment ago. I think some uncertainty might be relieved in my bill by expressly providing that the fair value shall be determined either by fixing it upon the basis of the value of the lands for general purposes or for special purposes. It is contended by some that the provision as it now stands is, to a certain extent, indefinite. I have some letters from Mr. M. H. Gerry, jr., consulting engineer, of Helena, Mont., making some valuable suggestions on this and other points, which I desire to read to the committee, because this comes from a man who is thoroughly familiar with this matter, and it also shows the viewpoint of some of the power interests.

This is a letter from Helena, Mont., under date of April 21, 1914, and goes on to say he has read with interest my bill to regulate this matter, and then quotes from the bill providing for the adjustment of the charge to be made and fixing the value of the land, which I provide shall be done either by agreement between the Secretary and the compny, or, if they can not agree, then they shall go into court. He says:

I take it that one of the aims of this bill is to provide a definite line of procedure and to remove the wide discretionary power of the departments, to the end that water-power grants may be obtained under uniform conditions and without burdensome restrictions, at the same time protecting the public interest by making all corporations enjoying such privileges public-service corporations subject to public regulation by the several States. While the clause I have quoted above appears, on first reading, to be eminently fair, nevertheless it leaves the matter in such situation that a department at any time may contend that the rights granted are of enormous value, basing this position on alleged prospective earnings or other financial advantage to the corporation applying for the grant.

Should the Secretary of the department having jurisdiction fail to agree with the applicant for the permit, then the matter must be determined in the United States district court "according to the laws and rules in force in said jurisdiction for the exercise of the right of eminent domain for public purposes." It may be contended on the part of the Government in such a proceeding that the land, while of little value for any other purpose, has great value for water-power purposes, and I believe, in accordance with the rules and practices prevailing, that a court would be obliged to take this view of the situation, and hold the reasonable value of the land to be its value for any purpose to which it could be put, and that the showing of possible earnings from a corporation desiring to use it for water-power purposes would be a measure of such value.

Of course, I think the courts would adopt a general and uniform practice with reference to that matter, but it is very easy to make it definite and certain, as Senator Works has made it in his bill, and as I suggested a little while ago.

Of course, under public rate regulation, the users of the power, in theory at least, pay all charges and expenses and it may be urged, therefore, that it is immaterial to a public service corporation, the value the Government attached to the land or the charges made therefor. I think differently, however, and believe it to be to the public interest to settle definitely by legislative enactment the charges, if any, to be made by the United States Government for such privileges, so that there may be absolute uniformity in the issuance of grants hereafter, and that the matter of charges may not be left to the discretion of the Secretaries, or even to the interpretation of the courts on such general grounds as in the clause quoted above.

In my judgment, the Government should make no charge for a grant of this kind (certainly none in excess of the amount required for administration purposes), the consideration being the public benefits resulting from the construction of hydroelectric plants, when subject to public regulation; these benefits being the addition to the taxable wealth of the communities and the reasonable rates for power guaranteed to the citizens. Any form of Government charge, based on alleged value of the right or

privilege granted, becomes an indirect tax on the industry and on the consumers, and is something to be avoided in legislation designed to promote the development of our water powers.

I will ask to be allowed to put this entire letter in the record and also another letter, without taking the time to read it.

The CHAIRMAN. That may be done.

(The letters above referred to will be found at the conclusion of to-day's record.)

Senator JONES. Aside from the policy of imposing a tax, there is an objection to levying this charge——

Senator STERLING. Just before you leave that question: In case a charge should be made beyond the definite and ascertainable expense of carrying on the work on the part of the Government, what disposition would you say should be made of the charges?

Senator JONES. Oh, if the National Government is going to impose a charge of that kind, it ought to go into the Treasury, subject to appropriation by Congress. There is a suggestion, I think, in the Ferris bill, that it should go into the reclamation fund.

Senator STERLING. Yes.

Senator JONES. I think that is a ridiculous suggestion. It is a sort of an attempt, apparently, to bribe one part of the country to support a measure which will benefit it at the expense of some other section of the country. It would take from the consumers in some communities money to be used for the benefit of some other community which had borne no part of the expense for the plant producing the power upon which the tax is levied. Whatever is exacted, over and above the expense of administration, should go into the Treasury and be appropriated by Congress.

Senator STERLING. What would you say to just giving it to the States in which the several power sites are situated?

Senator JONES. Well, I do not look upon that with very much favor. That looks very much as though it was just an attempt to get support by conferring some seeming benefit from the National Government. If the National Government is going to take this money for the use of its lands, why let it go into the Treasury and be appropriated for public purposes. It can not be taken upon any theory except that the public is interested in or owns the land; and if this is so, this money should go into the Treasury for the benefit of all the public and not some part of it.

Now, aside from the policy of imposing a tax, there is an objection to levying this charge upon the power developed instead of upon the value of the land, which to me is fundamental and which, in my judgment, we have no right to waive, even if capital does not object to it or if it may be considered as largely theoretical. We have no right to permit the Nation to invade the rights or sovereignty of the State. What the United States should do or will do as to the use of its lands is a matter of policy about which we may differ and upon which we may compromise, but the right of the State to use, regulate, and control its own property should not be compromised or invaded directly or indirectly. Let the state regulate and control the manner of the use of its property and the energy generated by it and fix the price to be paid by the consumers and let the Nation fix the price upon its property for its use. In this way the rights of both sovereignties are fully recognized and the

interests of the people fully protected. By any other method the people are injured and the sovereignty of the States ravished. Nothing is gained except that the right of some bureau chief or department head to interfere with the State in the use and control of its property is legislatively asserted. Neither the United States nor the States can afford to sanction such doctrine. The Representatives from the States of the West, which are the ones to be affected, can not afford to permit such legislation to be passed. We will make reasonable concessions, but this is vital and fundamental.

Those who are pressing legislation of this character, it seems to me, ought to understand that this contention is fundamental and that we will not consent to the passage of legislation that invades the sovereignty of the States where public land is situated simply upon the theory that the owner of that land can impose any condition which he sees fit with reference to the use or disposal of those lands.

Some of our people object to the retention of the title to these lands in the National Government for the reason that it reserves them from taxation. If the use of these sites were permitted free or upon a nominal charge there would be little if any force to this objection. Whatever tax would be levied by the State would have to be paid by the people consuming the power. Relieve them from any charge for the land and also from this State taxation and they can well afford to pay a little higher tax upon their other property in order to meet State and local needs. There is not enough in this contention to warrant delaying a reasonable measure. The people should not forget, however, that if the charge is levied upon the power developed, as is proposed by those who profess so much solicitude for their welfare, they will have to pay it in the price paid for their power, and, in addition, their State and local taxes will be heavier because of the exemption of these lands from taxation.

No grant should be made except upon reasonable provision for the highest practicable development covering all possible power uses. This is secured in my bill by giving to the Secretary the authority to require the plans and specifications to cover such use and development before approving them and making the grant effective. He may arbitrarily refuse his approval, but such action would come before the work is started and investment made. I believed, when I prepared the bill, that this was a wise provision and that as this discretion must be left somewhere, it could well be left with the Secretary. Further thought and consideration, however, forced me to the conclusion that giving the Secretary such authority will lead to very great expense, require the employment of a large force of engineers and experts and in fact lead to the creation of another department bureau and increase largely the expense of administration. It also involves an interference with the rights of the State, which has the right to determine the use of the water, the development needed, and so forth. I believe this can be covered better by the public-service commission of each State which will be much more familiar with local needs and conditions and much more responsive to the needs of the public, and I want to suggest an amendment to my bill, as follows:

In section 2 of my bill I provide that the grantee shall have this right of way after he has filed with the Secretary plans and specifica-

tions for his work, together with a map, and so forth, which shall be approved by such Secretary. Now, I want to suggest this amendment: In line 15, page 3, after the word "shall" strike out the words "be approved by such Secretary."

Strike out the word "if" and strike out the word "him" and put in the word "it" in line 16, and insert the following, so as to make it read in this way:

Drawings shall have the approval of the public-service commission of the State and its certificate to the effect that it appears to it that the proposed development will promote the highest and greatest practicable use of the water resources involved

That makes it absolutely definite and certain and makes the Secretary of the Interior a real administrative officer of this law, and makes it so that these plans and specifications will not be placed on file until they have the approval of the public-service commission of the State and its certificate that the proposed development, as shown by the plans and specifications, will result in the greatest possible practical use of the water-power resources involved. When this is done the grant attaches and not before. The certificate of the commission will not be conclusive on the commission as to development. If further development is needed, they may require it.

This will make the Secretary of the Interior purely an administrative officer and define with very great definiteness his duties in connection with this grant.

I agree with Representative Mondell in his statement the other day that the solution of this water-power question ought to be a very simple proposition. It seems to be very simple to me. The only trouble comes and the only uncertainty comes when you try to vest an agency with power beyond its jurisdiction and to place in the hands of the Secretary of the Interior authority and power to regulate charges, service, prices, and duties, which really rest with the State itself. Let us do the legislating, as we should, and let him execute, and if we have a due regard for the limits of the respective jurisdictions involved there will be little difficulty in passing good and workable legislation.

All desire the power or electrical energy furnished to consumers at the lowest possible rates and in the most efficient manner. This is secured through the regulating bodies of the State familiar with local conditions and responsive to local sentiment. No grant is made in any State where such regulative body is not provided for and no grant is made to any corporation or individual that is not subject to such regulative body. There is no more reliable agency to control these matters than these local agencies. This is conceded by both sides and yet those urging the House bill, while conceding the regulation of intrastate business to State authorities, nevertheless practically nullify this by inserting provisions giving to the Secretary of the Interior control over practically everything that is intrastate. This brings into operation two conflicting jurisdictions and can not help but result in controversy, uncertainty, and, in the end, stagnation in development. In the interest of the people and in the interest of the public we must place all control in one jurisdiction, and any legislation to be effective must be confined to this extent.

Now just for a few moments I want to call the attention of the committee particularly to the terms of my bill, which is S. 6712.

The first section of this bill grants—

to any State or municipal subdivision thereof or any mutual public service corporation organized for the purpose, or to any person or persons authorized by the State or States in which any portion of such dam, storage reservoir, water power or hydroelectric plant, or transmission or distributing lines may be located, to engage in the business of furnishing water for domestic uses, irrigation, transportation, or any other purposes, for light, heat, power, or energy, generated by electricity or otherwise: *Provided*, That the State in which such lands may be located shall have provided for the regulation and control of mutual and public service corporations and persons engaging in such business.

Now, that grant is simply upon compliance, of course, with the conditions of the bill. Mr. Pinchot made a statement before your committee the other day that this was a grant outright, and conveyed the impression, or his statement would convey the impression to the committee and to the country, that it was made absolutely without condition. Now, he certainly knew that was not a correct statement of my bill, or else he had not read the bill and made the statement without reading it, because it is not an absolute grant without conditions, but a grant upon conditions and a grant upon compliance with certain conditions of the act which fully protect the interests of the public.

Section 2 gives to the grantee a right to construct his works upon compliance with certain conditions and doing certain things. As amended, as I suggested, he must file with the Secretary his plans and specifications and drawings, etc., together with a certificate of the Public Service Commission of the State to the effect that the proposed development will promote the highest and greatest practicable use of the water resources involved.

Now, as I said a moment ago, that does not bind the public service commission to require nothing further. They have control of the matter. In the future, should they see that further development than that even contemplated by the plans and specifications filed should be necessary, the commission, under authority of the State law, can require them to put in such development.

Then he stated that my bill gives the right of eminent domain outright to these power companies, and that was something they had been wanting. It does not do anything of the kind and he should have known it did not do so, and if he had examined the bill carefully he would have known that all it does is this: After the necessary drawings and filings have been made to comply with the law, they have the right to the land. That fixes the right to the land, and then I simply provide a method by which the appraisement or fair value in accordance with the terms of the bill, shall be fixed upon which the annual payment is to be based. The right of eminent domain is not given them at all.

Section 3 of this bill provides that in the taking over of the property of the grantee as therein provided no value shall be claimed by or be allowed by reason of the grant or franchise.

Senator CLARK. Senator, if a company or corporation under the provisions of your bill had agreed upon a price to be fixed for this right of way, should or should not that price enter into the estimate of the value on which it should be taken over, or would you have considered that to have been absorbed by the rates collected?

Senator JONES. The rate for the power?

Senator CLARK. Yes.

Senator JONES. No; that is not to be taken into account for fixing rates to be charged by the public service commission. They are not to make allowances for that. At least, if that is not clear, that is the purpose and that is the intention, that that shall not be done.

Senator CLARK. Then if that is true, ought not the company to be repaid the cost, whatever it might have been, of the site?

Senator JONES. The site has not cost anything. They do not have to pay anything for the site. It is an annual rental.

Senator CLARK. Oh, they only pay an annual rental?

Senator JONES. Yes, on the basis of the value determined as provided in section 2. They do not have to pay the sum fixed. That is simply used as a basis upon which the percentage they have to pay each year is fixed, you know. That is all that is.

Then section 4 provides, in brief, that where it is necessary to execute contracts extending beyond the 50-year period, it shall be done upon the approval of the public service commission. And then, whenever the plant is taken over either by the United States or anyone else, these contracts are assumed.

Section 5 is the section providing for the termination of the grant and provides that Congress may at any time provide for the termination of the right to occupy such land upon the expiration of such 50-year period. Now, the meaning of that, or the intended meaning of it, whether it is clear or not (it is not as clear to my mind as it ought to be, except I know what I intended to express) is that Congress, after the passage of this act, could to-morrow, if it saw fit, provide for the termination of this right to occupy the land at the end of 50 years; or that it can wait for the 50-year period to expire and then provide a way by which it could be terminated.

That proposition we considered rather carefully in the Irrigation Committee, and this was about the language they tentatively agreed upon. In other words

Congress may at any time—

means that we might at any time, before the end of the 50-year period or at any time after the end of the 50-year period, provide the method by which this right shall be terminated and the property taken over—

and provide for the disposition of all the property of the grantee dependent for its success upon the rights hereby granted, which shall include the necessary appurtenant property created or acquired as valuable or serviceable in the distribution of water or in the generation, transmission, or distribution of light, heat, power, or energy upon the payment of mere compensation and upon the assumption of all contracts entered into by said grantee which has the approval of the newly constituted public authority having jurisdiction thereof.

Section 6 provides for insuring the prompt development of this plant and requires the grantee to commence the development within two years from the date of the agreement or adjudication of the value. In line 18 I have suggested an amendment to my bill. Strike out the word "upon" and insert "two years from." Then I have made a further change on lines 24 and 25, which read that it

shall, within the further term of five years, complete and put in commercial operation such part of the ultimate development as the Secretary or Secretaries of the department or departments then having jurisdiction over such land

I strike out that and leave it to the public-service commissions instead of the Secretary, and provide that the grantee within five years—

shall complete and put in commercial operation such part of the ultimate development as the public-service commission of the State shall deem necessary to supply—

And so forth; and then make the necessary changes in the bill to correspond with that amendment.

Although I have not given it a great deal of thought, I want to suggest this amendment further at the conclusion of the sixth section, namely, to insert:

And unless otherwise provided by Congress, the Secretary or Secretaries having jurisdiction of the lands involved may require such development for interstate service as may be necessary.

Now section 7. I am inclined to think this could go out entirely, but I put it in simply as a notice to those interested rather than as deeming it necessary to assert any rights. It provides that rates charged by all grantees shall be reasonable and the service shall be efficient. Of course that is entirely within the power of the State authorities to-day and it is not necessary for us to make any assertion of it. It is also provided—

That the United States reserves the right to regulate rates and service to the consumer to the extent that the business of the grantee may be or shall become interstate.

We already have that right and we do not need to assert it. However, I do not think there is any harm in asserting it in the bill.

Section 8 provides a method by which, under grants heretofore made, grantees who now have rights can come under the terms of this bill.

Section 9 provides for the location and settlement of lands that may be withdrawn for this purpose without interfering with water-power development.

Section 10 is a provision against artificial monopoly and unlawful restraint. I am inclined to think that that is covered by law now, the antitrust laws, but to remove any doubt it has been put in this bill. And I find it is put in almost verbatim in most of the other bills, and is reported verbatim, I think, in the bill from the Commerce Committee with reference to navigable streams.

Then, section 11 provides the cancellation feature by the court for a violation of the terms of the act.

Section 12 gives the Secretary authority to make whatever rules and regulations may be necessary to carry out the provision of the bill.

Section 13 is a provision that was put in at the suggestion of a good many of our mining people in the West and for their benefit. It provides:

That the provisions of section 1 of this act defining the qualifications necessary for a grantee hereunder shall not apply to any water-power developments or proposals for development of a capacity of 1,000 horsepower or less, and in such cases the benefits of this act shall extend to any person, corporation, or association of persons which shall comply with the other terms and requirements hereof."

In other words, where the development is 1,000 horsepower or less, the grantee need not be a public-service corporation or individual subject to the public-service acts. There is no necessity of a development of this size being subject to public-service regulation.

Section 14 is the repealing clause as provided in the different bills.

Senator WORKS. Senator Jones, if I understood you, you provide that the amount of money paid to the Government by way of rental, or whatever it may be, is not to be taken into account in fixing the rate

Senator JONES. Oh, no, Senator; not that. That is taken into account, of course.

Senator WORKS. I wondered how you could do that, because that would be in direct conflict not only with the holdings of the State commissions, but in violation of their duty, because it would certainly be their duty to take into account any charges paid by the corporation as a part of the operating expenses.

Senator JONES. Yes; that is correct and an unanswerable argument against levying any such charge or collecting any such rental.

Senator SHAFROTH. I would like to be permitted to ask Senator Jones a question.

The CHAIRMAN. All right.

Senator SHAFROTH. Senator Jones, I have looked at the provisions of your bill and I think they are much better than the provisions in the bill that comes over from the House, but there are some things you said I want to call to your attention.

You refer to the question of the amount that the State might impose as a tax upon these plants as not being very large. I want to call your attention to one of the plants in our State, at Ed Taylor's home, in Glenwood Springs, Colo. A few miles from there there is a plant that cost $8,000,000 or $10,000,000. It consists principally of a tunnel running through the mountains parallel to the stream and at a lower grade than the stream. It works its way up relatively to the stream and gets to a height of some several hundred feet and then, by a precipitous fall, makes a great water power that furnishes electricity to the city of Denver over the mountains for lighting purposes and street car purposes.

Now, that plant is worth, for taxation, $8,000,000, and if that were exempted from taxation the result would be the people around Glenwood Springs would not get much benefit from it, and the people of Denver, four or five counties beyond, would get the most benefit. It is impossible under any of these laws, as long as you have a leasing system, to have a tax imposed upon the plant, because the principal value of the plant is a tunnel that runs through the mountains. It would be impossible to levy upon it, impossible to tax it, because it is so connected with the soil. And if the title remains by virtue of a leasehold estate in the power company and the fee-simple title remains in the government it can never be taxed, and Glenwood Springs, or the county in which it is situate, would lose the value there in taxable property of $8,000,000.

Now, I think all of these matters ought to be subject to taxation by the State and I think it is a violation of the practical agreement between the Government and the States that it will permit the States to exercise sovereignty. And the right of sovereignty is well recognized to be the right to tax all properties within the borders of the State.

Senator CLARK. Senator, is this property on Government land?

Senator SHAFROTH. Yes; it is on Government land.

Senator JONES. I will say there is not much difference between you and me as to what we would prefer to have done. I agree with you on that. And I would rather see your bill passed than mine.

But there is not sufficient objection there, so far as I am concerned, to warrant me in opposing any legislation because of a provision of that kind.

Now, just a word or two more and then I am through.

There is one suggestion that Mr. Pinchot makes, and that has been made again in these hearings and in the discussion of this question, i. e., that if this matter is left to the States politics will have a great deal of influence in connection with it. And he suggested in his statement, with reference to my bill, where I provide that Congress shall terminate this grant, that it will bring the matter into politics, and "you know how difficult it is to pass bills and to prevent the passage of bills," etc.

Mr. Chairman, in my judgment there is more politics to the square inch in giving the Secretary of the Interior the authority over these matters that is given in the Ferris bill than there is politics to the square mile in the States if the regulation is left to them, as of right it must be. I think the experience of each Member of the Senate here will bear out my statement. The Secretary of the Interior can not act on these matters himself, he can not make personally the investigations necessary to be made; he must act upon the report of some subordinate. Now, if any political influence should be thought of or if anyone should be disposed to use any political influence, this is the system under which it can be most effectively exerted. The interest desiring to get a permit, if it is interested in offering any suggestion that might be out of place or of using any influence, political or otherwise, knows exactly who is going to pass upon its application in the first instance and it knows if it can get that man's opinion or decision in its favor that the chances are ninety-nine out of one hundred that it will be approved further on up, and he is the man who will be seen. It knows exactly where to bring its influence to bear, and it will often accomplish its object without the man higher up knowing anything of its efforts.

I have in mind a particular instance that illustrates this matter. We had in our State a certain interest which wanted to get an extension of time for completing a certain work. It had gotten one or two extensions of time. It was not prosecuting the work as rapidly as the people of the community thought it should; it was not doing it as rapidly as it ought to do, and they were protesting against further extensions of time. An agreement was made after the matter had been considered fully by which this interest was given a further time to complete its work; it assured the department and the representatives of our State that it would surely have its work done by a certain time; the people were assured this would be done, and they were reasonably well satisfied. About the time this further extension expired it had not completed its work, and before the time for the expiration it came in, without any consultation with the representatives from out State who had been consulted before and whom this interest knew very well were interested in the matter and whose express consent had been secured to the last extension, and went to the department and secured an extension of time and had it it approved by the Secretary a month or two before anybody else knew anything about it or that it would ask a further extension.

I do not charge them with anything improper, yet they should have advised the parties, who they knew were interested in the matter,

of what they were going to do, and the department also should have given some consideration to those whom it knew had opposed this proposition before and who had been complaining about these extensions of time. Many, many protests had been filed against the former extension and were no doubt among the papers in the case.

Senator CLARK. Senator Jones, was the department fully aware, do you think, at that time, of the interest which the members of your delegation had theretofore had in the matter and was its attention called to the fact afterwards?

Senator JONES. Oh, yes.

Senator CLARK. What was the reason given?

Senator JONES. The reason given was that it had come up in the routine way and been acted upon. A routine letter had been prepared by a subordinate in the department and it came up on the Secretary's desk and was signed by him and passed on. That was the way it was done.

Mr. FINNEY. You do not charge anything corrupt in connection with that matter?

Senator JONES. Not at all, Mr. Finney. There was not anything corrupt; I have no doubt about that. But it was not right, that is all; it was not done right. The subordinate official knew that protests were on file against the former extension of time. Letters had been filed with the department (I think I am safe in saying hundreds of letters had been filed) and were among the papers in connection with it. The attorney for this interest knew who would prepare such a letter and doubtless went to him and no doubt made a good showing from his standpoint, and he prepared the letter and his chief signed it in the ordinary course.

Senator CLARK. You think it is a fault of the system?

Senator JONES. Yes; and I do not want to extend the faulty system in this matter. We should make the way of the department plain and certain in matters so important as this.

Then, again, suppose that a Secretary comes in with a certain policy and wants to carry it out with reference to these sites. His subordinates will try to conform to that policy, and if there is a subordinate who does not act in accordance with this policy somebody else will be put in charge, until finally, when they do get a report (reports will have to be made on these applications) the report will be in accord with that policy. There should be no room for a policy on the Secretary's part. Congress should fix the policy.

Now, I have a case in mind, which I am going to cite without naming anyone. You know that entries of coal lands have been suspended for a long time. Many years before this suspension was had claimants filed entries in our State. They put up their money, and finally they put up the money for surveys at $10 per acre. All of them together had put up several thousand dollars. The department sent an agent out to investigate. He reported nothing against those claims; they were legal; the land was coal land; and they should be allowed. Well, before they got around to it this first report, I think, was made before the survey was made, and then the survey was made, and they put up their money—this new policy came into operation. The department thought the title to coal land should not pass from the Government, and so they sent another agent out to reinvestigate these claims, and he reported them all right; then they

sent another agent out, and he reported favorably; and then they sent another agent out, and finally got an adverse report. The claimants got discouraged; some of them died, and I have been working for years to get their money refunded, and they have given their relinquishments to the Government.

Senator SHAFROTH. Is not that an illustration of the fact that the department for the last 10 years has been pursuing the policy of refusing coal-land entries solely and purely to force the people of the West into a leasing system of those lands?

Senator JONES. Absolutely. I received just the other day a letter from the Department in answer to a letter of mine with reference to a claimant who had offered a filing with reference to land withdrawn for water-power purposes and the Department wrote to him and sent to me a letter stating "If this claimant insists upon a decision of his right to make this entry now, it will be adverse; but if he will wait until H. R. so and so goes through, then we may be able to do something for him."

And this is not the only letter of that character I have received. I have no doubt other Senators have received the same thing.

Now, there is nothing wrong morally about that, so far as that is concerned. I do not charge any corruption, or anything of that kind, with the department. They have a policy, however, they want to enforce and they want to get it into legislative form.

Senator WORKS. You say there is nothing wrong about it. I should think there would be something wrong in refusing a party the right he has under existing law, upon the theory there is going to be another and different law passed after a while.

Senator CLARK. It is simply suspending the law of Congress and it is denying to a man his legislative rights.

Senator JONES. I am inclined to think, in that case, this man did not have a technical right because a withdrawal had been made. I think that is the fact. But the letters simply indicate the pressure that is being brought to bear to get legislation.

Senator SHAFROTH. For what purpose was the withdrawal made?

Senator JONES. For water-power purposes.

Mr. FINNEY. Pursuant to the act of Congress passed in June, 1910.

Senator JONES. Yes; it was in pursuance to the act of Congress. I do not charge any corruption. It simply illustrates what will happen when you vest a discretion in an administrative officer or department.

Senator CLARK. In connection with that last statement, all the Western States ask is that the department proceed under the law to do the things that the law says they shall do. If the law gives the Western States the worst of it and the law is acted on, the Western States can not complain; but if the law opens up the Western States and the department declines to act upon that law until a law satisfactory to the view of the department is passed, then the Western States do complain. That is our position.

Mr. FINNEY. Pardon me for butting in, but I just wanted to explain the withdrawal was made pursuant to that act of Congress. And in our view we would not have the authority, in view of that act, to issue the permit.

Senator SHAFROTH. But is not that solely for the purpose of forcing a leasing system upon the West?

Senator ROBINSON. I do not think he ought to be asked that question, as to what the purpose of the department is.

Senator SHAFROTH. No, I suppose not. I will withdraw the question.

Senator WORKS. The impression, I think, is that the withdrawal was for improper purposes.

Senator ROBINSON. But if the law required it, it does not matter, and that is not germane to this hearing or any other hearing as to what we might conceive the purpose was.

Senator WORKS. No; not if the law requires it. But if it only permits it and it is done for another purpose and not for carrying out the purpose of the law, it would be quire different.

Senator ROBINSON. Well, in any event, Congress is not in an attitude to complain, and a Member of Congress is not in an attitude to complain of the act of an administrative officer withdrawing land which was authorized to be withdrawn by this act of Congress.

Senator CLARK. Congress is entitled to complain, because Congress was assured time and time again that the very purpose of these withdrawals was to assist in the immediate development of the western lands. Otherwise that withdrawal act never would have gone through Congress. But immediately after the withdrawal order was signed they proceeded to use it to retard the development of the land.

Senator JONES. And it was used that way?

Senator CLARK. It was used in that way by Secretary Garfield; it was used that way by every Secretary who has been in the office since the law was passed. It was used by the Presidents, both Republican and Democratic, and there is no politics in this fight the West is making. It is solely a question of self-preservation and development; that is all.

Senator ROBINSON. The only principle I am contending for is that Congress should not pass a law authorizing an action to be taken by an administrative officer and then censure the administration of the law that it has authorized. And the responsibility is on Congress. We have the power now to repeal the law, and we have the power now to impeach any officer who refuses to obey the law.

Senator CLARK. I am not complaining as long as the department acts. What I am complaining of is that I believe under the laws we have passed the department absolutely refuses to act. We have laws right now - - -

Senator ROBINSON. The complaint is, however, it has acted in this case.

Senator CLARK. We are speaking, you and I, of general functions

Senator JONES. Yes.

The CHAIRMAN. I suggest that Senator Jones should be allowed to proceed.

Senator ROBINSON. I am perfectly willing if you are through, Senator Clark, but when it comes to repeated charges being made - and I will take a little time myself to state my understanding directly or indirectly, against an administrative officer, I do insist upon this principle, that Congress can not enact a law and then censure a department for acting under the law. It can not hide itself behind an employee for the performance of any act in accordance with the law.

Senator CLARK. Now, my statement—I have sat here longer than the Senator has this morning—was only called up by a statement of the administrative officer, and I wanted to give my view in regard to the matter, and in my statement I said I was not complaining of the department exercising the power it had under any law Congress had given; but what I was complaining of was that it did not exercise and did not carry out the laws which Congress had enacted.

Senator ROBINSON. Do you contend the department did not have the power to make the withdrawal in the case made out?

Senator CLARK. Not at all.

Senator ROBINSON. Then it did act in conformity with that power?

Senator CLARK. I have not any question about that.

Senator ROBINSON. So far as I am concerned, you are at liberty to proceed.

The CHAIRMAN. Go ahead, Senator Jones.

Senator JONES. I want to say this is very entertaining to me.

Senator CLARK. I want to say that whatever I have said here I do not want to go into the stenographer's record—that is, the controversy we have just had in regard to the power of the department. All I want in is my answer to the administrative officer, who made the suggestion.

The CHAIRMAN. What do you desire, Senator Robinson?

Senator ROBINSON. I am perfectly willing that what I said shall go in.

Senator CLARK. All right, then, I am perfectly willing that it should all go in.

The CHAIRMAN. Go ahead, Senator Jones.

Senator JONES. I want to say, frankly, I have very much sympathy with the suggestion made by the Senator from Arkansas. We passed a general law giving an administrative department authority to withdraw lands for certain purposes. We did not name those purposes very definitely, either. They have withdrawn the lands, and now they are going to keep them withdrawn until we provide legislation in accordance with their views or so plain and definite that they can not avoid them. I can not complain of them for doing it. Secretaries of the Interior have certain policies they want to carry out with reference to the lands withdrawn, and if that policy is not declared in a legislative way they will keep those lands withdrawn until Congress acts, and in every way bring pressure upon Congress to do as they think should be done. We really can not complain at the exercise of power that we have placed in their hands. It is up to us to declare a policy that they must execute.

As the Senator says, we can repeal the law, but we will not do it. We are now preparing to pass a law to make the resources withdrawn available. Let us make no mistake now. Let us make it definite, plain, and certain. Let us fix and declare the policy. This is our duty. One of the objections I have to the Ferris bill is that it leaves so many things to the discretion of the Secretary of the Interior. Congress ought to pass legislation, and we of the West should insist that whatever legislation is passed shall be definite, and make of him an administrative officer and not a legislative officer.

Now, as illustrating further, and merely illustrating, the possibilities of influence (I am not saying it was improper influence, but as

illustrating what can be done by influence over any department and, as the Senator from California said, there is no politics about this at all; most of the things I am referring to are under a preceding administration), there was a certain branch of the Government had certain work to do. We had left to it the discretion of taking up this project or that project, or taking up one project and leaving another project go. The departmental officials reported against a certain project and the Secretary of the Interior was against it. The President ordered it to be taken up. In other words, after the Secretary of the Interior had rejected it, influence was brought to bear on the Executive. He was convinced it was a desirable project at any rate they got him to issue a direction to the Secretary of the Interior to take up that project. It was taken up, and it has been a failure ever since it was completed.

Senator ROBINSON. When was it, Senator?

Senator JONES. A few years ago.

Senator ROBINSON. How long ago?

Senator JONES. Probably six, seven, eight, or nine years ago, something like that. It has been a failure ever since it was put in.

Now, here is another proposition: Bids were called for some time ago for certain construction work. Under the law the Secretary is to let the contract to the lowest responsible bidder. When the bids were opened, the Secretary said, "None of these prices are satisfactory. I can not accept any of them." Well, naturally, I would suppose that all the bids would be rejected and new bids called for; but, on the contrary, those people who had submitted bids were permitted to submit further proposals. There was one bid that was $10,000 less than another, and it has been reported (I do not vouch for it at all) that before action was taken Senators were called in and consulted with reference to it, of course, belonging to the administration then in power. And a contract was let for one of those propositions to a bidder that was $10,000 more than the lowest bidder, whose services in the past had shown it to be thoroughly competent. Now, I do not say that any improper influence was exerted. I have no doubt but that the Secretary acted honestly, but such a course can not be safely followed. These are the facts, and show exactly what can be done in the administration of laws that we leave uncertain.

Senator ROBINSON. I think you ought to tell us, in view of that statement, when and in what case that occurred. I think the plain implication is that something was done in that case that ought not to have been done, somewhere, by somebody.

Senator JONES. I will do that a little later on in the discussion on an appropriation bill which will come up before the Senate.

Senator ROBINSON. All right.

Senator JONES. Now, there are other instances I could mention here, aside from the suggestions we see from time to time that this Senator and that is to be punished for opposing this or that policy, for which suggestions I fear there is too much basis; but I am not going to take the time of the committee to do it. You can multiply instances in your own experience illustrating the point. I do not like such a situation. Administrative officers should not desire to be placed in such a situation. The possibilities under legislation affecting such tremendous interests as will be touched by this legislation

are boundless and should make us most careful to define with great exactness the course we want followed. We ourselves especially know how often we are called upon to go down to the departments to urge them to do this, and to urge them to do that, and the other thing in particular instances. Our constituents seem to think in a great many cases all we have to do to get something is to ask for it, because we are Senators or Representatives. And they write to us about these things, and you know what effect it has with reference to those matters on subordinates. We go and talk to them about a case. I suppose the mere fact that we go there, being Senators and Representatives, probably influences them more or less, in some cases. It should not, and we ought to relieve them from this just as much as we can, and I want to do it in connection with this power bill.

Senator ROBINSON. May I ask you a question there which is germane to your suggestion?

Senator JONES. Yes.

Senator ROBINSON. What discretion, if any, do you think ought to be vested by this legislation in the Department of the Interior?

Senator JONES. Just as little as possible. My bill expresses about what I would like to have done. I do not think I leave very much discretion. I say whenever a person does certain things and files certain plans and specifications, approved, as I have suggested in an amendment, by the public-service commissions of the States, that then he has the right of way and the sites for his proposed work. Then I provide that he shall agree with the Secretary of the Interior upon a fair value for the land upon which an annual rental is to be based; and if they can not agree, it is fixed by the court, so there is no discretion there. After that is done the Secretary of the Interior has nothing to do except to see that the annual charges for the lands of the Government are paid. There is practically no discretion left in the Secretary of the Interior under my bill. And yet, in my judgment, the rights of the public are fully and adequately protected, the water-power development will take place, the charges will be regulated, unnatural and improper monopoly will be prevented, and full development will take place. Under my bill the Secretary will be really an administrative officer with very little to do. The people of the respective States who are most interested in development and who are most affected by the charges and the services will see to it that they are protected from extortion and that their service is efficient. No one can controvert this without impeaching the capacity of our people to govern themselves and promote their own welfare.

I think, Mr. Chairman, that is all I care to submit to the committee.

The CHAIRMAN. All right, Senator Jones.

Senator JONES. I am very much obliged to you, gentlemen.

The CHAIRMAN. That closes the hearings——

Senator JONES. Just a moment. I have seen many references in this testimony to the permits revoked under the act of 1901. I have not seen anywhere whether you have had a copy of the memorandum upon which they were revoked. If you have not, I have it here and would like to put it in the record, together with a list of those permits which were revoked. Here is the memorandum signed in pencil by Secretary Garfield, and then the opinion.

Mr. WELLS. I put in that list, Mr. Chairman, in my testimony.

Senator ROBINSON. Did you put in the opinion?

Mr. WELLS. I put in the revocation order signed by both Secretary Garfield and Secretary Wilson.

Senator JONES. I have the memorandum prepared and signed by Secretary Garfield, making the revocation of the permits for power purposes, and then I have the opinion of the Department of Agriculture, office of the Secretary, addressed to the Forester, and that is signed by the Secretary of Agriculture and concurred in by the Secretary of the Interior.

Mr. WELLS. That was the one I put in.

Senator WORKS. It would not take up much space, and I think they ought to go in together.

The CHAIRMAN. All right.

Senator JONES. I have also the resolution of the governors of the Western States which I would like to insert. I also call the committee's attention to this fact, which they may have overlooked, that the Committee on Commerce has reported a bill covering this matter with reference to navigable streams. This bill contains some provisions that might well be put in the bill before you. I understand that bill has the approval of the President, and if so you need not hesitate to change the Ferris bill in its most important provisions.

The CHAIRMAN. All right; do you want to insert that in the record?

Senator JONES. No; I simply call the attention of the committee to it.

The CHAIRMAN. All right. That closes the hearings.

(The papers offered for the record by Senator Jones are as follows:)

WASHINGTON, D. C., *March 9, 1914*

Hon. WESLEY L. JONES,
United States Senate, Washington, D. C.

MY DEAR SENATOR: I read with great interest your water-power speech of March 6. You have stated forcibly the objections, from the point of view of investors, to the suggestion that the Government take over the permanent works of the lessee at the end of 50 years without compensation, this to be in lieu of rental. It seems to me that such a policy is equally objectionable from the point of view of the public.

It is generally agreed by all who have carefully studied the subject: First, that water power is a natural monopoly; second, that its benefits, over and above a generous return to investors, should accrue to the public; third, that, so far as possible, it is better that the public should get these benefits in the form of low price for power rather than in large rentals for the Public Treasury, and this may, in part, be accomplished by fair, intelligent, and firm regulation of prices and services by the State or local authorities. But it can not be wholly so accomplished. The monopoly value of a water-power site over a steam plant, or of a favorably conditioned site over a less favorably conditioned one, when all are competing in the same market, can not be transferred to the public by regulation of prices and services, for such regulation must treat all three computing plants alike and must stop short at a point which will leave a fair profit to the least favorably conditioned one. This means an undue profit to the more favorably conditioned plants, and this undue profit can be transferred to the public only as rental paid into the Public Treasury.

We should not forget that land value or monopoly profit is the heart of the water-power question. All human experience teaches that this value will increase enormously as population grows. Any legislation which prevents the public from retaining, so far as practicable, this unearned increment is wrong in principle. I therefore object to that provision of your bill (S. 4415) which fixes the value of each site when the lease is made and fixes a rental of 5 per cent on that value for 50 years. Five per cent may be too high, especially at first, or too low, especially at last. The executive officer who gives the lease should be free to make the best bargain he can in each case. Only so can development be duly encouraged and the public duly protected. If his terms are too hard capitalists will not invest and his responsibility for blocking

development will force him to give better terms. If they are too easy public criticism will be centered upon him and will force him to exact more. It is not generally known that all rentals received by the Interior Department for public lands in the arid States are paid into the reclamation fund and are therefore devoted to the development of those States. This ruling was made in the summer or fall of 1912 in the matter of rentals paid by the Owl Creek Coal Co. in Wyoming.

I was glad to note in your discussion of the existing water power permit law under which all sites in the Western States are open to development, except a few in Indian reservations (act Feb. 15, 1901), strong criticism of the proviso whereby all permits are expressly made revocable in the discretion of the issuing Secretary. For this the Forest Service has been urging since 1907 the substitution of a 50-year lease. The Interior Department has done the same for the last two or three years. May I call your special attention to the fact that this change is the one thing needful in law, that it could be accomplished by a few words, that bills to accomplish it have been pending many years, and that as soon as it is accomplished, the Secretaries of Agriculture and Interior could offer terms that would attract capital to this field of investment as they can not now.

I think it would be extremely unwise to deprive the Department of Agriculture (Forest Service) of its jurisdiction of water-power development in national forests. That bureau has had the longest experience with the permit system, has a field and office force thoroughly familiar with the work, earnestly desirous to protect the public interest, and at the same time to do business promptly in a business-like way. I believe they have given general satisfaction to business men in the matter of promptitude and business responsibility. It is entirely possible to harmonize their administration with that of the Interior Department (indeed, that has already been done) without any legislation, and of both with the War Department with very little legislation, provided the officers of the three departments earnestly desire to cooperate.

May I also suggest that the recent decision of the Circuit Court of Appeals for the Eighth Circuit in United States *v.* Utah Power & Light Co. (209 Fed. Rep., 554) might well be added to the cases cited in your speech. It upholds the contention of the Forest Service, made under my advice, that the right of way grant for ditches and canals made by the act of 1866 was repealed as to water-power development by the first permit act (of 1896), which was replaced by the present permit act (of February 15, 1901).

If your speech is to be separately printed, may I request the favor of a copy?

Very sincerely, yours,

PHILIP P. WELLS.

HELENA, MONT., *April 21, 1914.*

Hon. WESLEY L. JONES,
United States Senate, Washington, D. C.

DEAR SIR: I have read with interest your bill to regulate the development, operation, and maintenance of water powers on lands of the United States, and while I am heartily in accord with the general principles of this bill, there is one point to which I desire to direct your attention, for the reason that in the actual working out of the matter it might largely offset the advantages which would otherwise result from the enactment of this legislation. I quote from the bill as follows:

"Within ninety days after the approval of such plans, specifications, and drawings said grantee and such Secretary shall agree upon the then fair market value of the lands proposed to be occupied which are owned or controlled by the United States, and in the event of their failure to agree within such time, then such grantee shall have the right to, and may, begin proceedings in the district court of the United States for the district in which such lands or any part thereof may be located for the purpose of determining the then fair market value thereof. Such district court is hereby given jurisdiction of said proceedings for such purpose, and service of process may be had upon the clerk of said court, and upon such service being made the Attorney General of the United States shall enter his appearance for the United States. Such proceedings shall be conducted according to the laws and rules in force in said jurisdiction at said time for the exercise of the right of eminent domain for public purposes."

And again as follows:

"During the occupancy of said land by the grantee it shall pay into the Treasury of the United States annually, in advance, a sum equal to five per centum upon the fair market value of such land as so determined by agreement or final adjudication."

I take it that one of the aims of this bill is to provide a definite line of procedure and to remove the wide discretionary power of the departments, to the end that

water-power grants may be obtained under uniform conditions and without burdensome restrictions, at the same time protecting the public interest, by making all corporations enjoying such privileges, public-service corporations subject to public regulation by the several States. While the clause which I have quoted above appears on first reading to be eminently fair, nevertheless it leaves the matter in such a situation that a department at any time may contend that the rights granted are of enormous value, basing this position on alleged prospective earnings or other financial advantage to the corporation applying for the grant. Should the Secretary of the department having jurisdiction, fail to agree with the applicant for the power, then the matter must be determined in the United States district court, "according to the laws and rules in force in said jurisdiction for the exercise of the right of eminent domain for public purposes." It may be contended on the part of the Government in such a proceeding, that the land, while of little value for any other purpose, has great value for water-power purposes, and I believe, in accordance with the rule and practice prevailing, that a court would be obliged to take this view of the situation, and hold the reasonable value of the land to be its value for any purpose to which it could be put, and that the showing of possible earnings from a corporation desiring to use it for water-power purposes, would be a measure of such value. Of course, under public rate regulation, the users of the power, in theory at least, pay all charges and expenses and it may be urged, therefore, that it is immaterial to a public-service corporation, the value the Government attached to the land or the charges made therefor.

I think differently, however, and believe it to be to the public interest to settle definitely by legislative enactment the charges, if any, to be made by the United States Government for such privileges, so that there may be absolute uniformity in the issuance of grants hereafter, and that the matter of charges may not be left to the discretion of the Secretaries, or even to the interpretation of the courts on such general grounds as in the clause quoted above.

In my judgment, the Government should make no charge for a grant of this kind (certainly none in excess of the amount required for administration purposes), the consideration being the public benefits resulting from the construction of hydro-electric plants, when subject to public regulation; these benefits being the addition to the taxable wealth of the communities and the reasonable rates for power guaranteed to the citizens. Any form of Government charge, based on alleged value of the right or privilege granted, becomes an indirect tax on the industry and on the consumers, and is something to be avoided in legislation designed to promote the development of our water powers.

I trust you will pardon me for calling your attention to the matter mentioned above, but it seems to me of such importance in connection with the proposed legislation that I thought proper to write you on the subject. I think you are doing great public service in pressing the matter of water-power legislation at this time.

Very respectfully,

M. H. GERRY, Jr.

HELENA, MONT., *May 9, 1914.*

Hon. WESLEY L. JONES,
United States Senate, Washington, D. C.

MY DEAR SENATOR: I beg to acknowledge receipt of your letter of April 27 in reference to your water power bill. I am very much in favor of legislation along this line and I appreciate, of course, the difficulties encountered. It is not merely the matter of the Government collecting a charge upon the power generated or even a certain amount for the rights granted, to which I object, but it is the uncertainty and the lack of uniformity in reference to the charges that has caused most of the trouble. As a matter of principle I do not think the Government should make a charge, over and above the necessary cost of administration for the reason that such charge in connection with public regulation of rates, simply comes back as a tax on the consumer. On the part of the power company however, it would make no difference what the Government charge amounted to if it were uniform in all cases. The charge, however, in leaving this matter of charges or fees, or by whatever name known, to the discretion of a Secretary or any other officer of the Government. If this is done there will be no uniformity in the grants and one company may obtain its concessions for little or nothing while another company may be asked to pay an enormous fee under another. It leaves the matter open to be manipulated by politicians and subject to the powerful influence of great corporations. Every uncertainty invites political pressure and influence.

I do not mean to infer that there would necessarily be any corrupt practice; but with the changing times and changing opinions of men there will be bound to follow an ever-varying set of conditions if left merely to the discretion of an individual. I think, therefore, that the law itself should specify the amount of the charges and all other conditions, leaving to the departments merely the administration of the matter.

Your bill provided for a method of determining the value of the properties in accordance with the rules in matters of eminent domain, and my only objection to this form of proceeding is that it leaves with the prosecuting officer of the Government the line of defense in reference to values. If the land is alleged to be valuable for water-power purposes, then it may or may not have great value to the corporation, and every court and every jury must form their own opinions as to how far this value should attach to a property to be used by a public service corporation where the rates are regulated by public authority. To my mind there is room for endless argument here, but I doubt if there will be much uniformity in determining values of water-power properties in this manner.

I appreciate very much your efforts in attempting to secure uniform and broad legislation covering the matter of water powers on the public domain, and I feel confident that your broad knowledge of this subject will materially aid in securing adequate legislation.

Yours, very respectfully,

M. H. GERRY, Jr.

EXTRACT FROM LAWS OF THE STATE OF WASHINGTON.

SEC. 26. *Duties of gas, electrical, and water companies.*—All charges made, demanded, or received by any gas company, electrical company, or water company for gas, electricity, or water, or for any service rendered or to be rendered in connection therewith, shall be just, fair, reasonable, and sufficient.

Every gas company, electrical company, and water company shall furnish and supply such service, instrumentalities, and facilities as shall be safe, adequate, and efficient and in all respects just and reasonable.

All rules and regulations issued by any gas company, electrical company, or water company affecting or pertaining to the sale or distribution of its product shall be just and reasonable.

Every gas company, electrical company, and water company shall construct and maintain such facilities in connection with the manufacture and distribution of its product as will be efficient and safe to its employees and the public.

SEC. 54. *Charges and service of gas companies, electrical and water companies to be fixed by commission.*—Whenever the commission shall find, after a hearing had upon its own motion or upon complaint as herein provided, that the rates or charges demanded, exacted, charged, or collected by any gas company, electrical company, or water company for gas, electricity, or water, or in connection therewith, or that the rules, regulations, practices, or contracts affecting such rates or charges are unjust, unreasonable, unjustly discriminatory, or unduly preferential, or in any wise in violation of the provisions of the law, or that such rates or charges are insufficient to yield a reasonable compensation for the service rendered, the commission shall determine the just, reasonable, or sufficient rates, charges, regulations, practices, or contracts to be thereafter observed and in force, and shall fix the same by order as hereinafter provided.

Whenever the commission shall find, after such hearing, that the illuminating or heating power, purity or pressure of gas, the efficiency of electric lamp supply, the voltage of the current supplied for light, heat or power, or the purity, volume, and pressure of water, supplied by any gas company, electrical company or water company, as the case may be, is insufficient, impure, inadequate or inefficient, it shall order such improvement in the manufacture, distribution or supply of gas, in the manufacture, transmission or supply of electricity, or in the storage, distribution or supply of water, or in the methods employed by such gas company, electrical company or water company, as will in its judgment be efficient, adequate, just and reasonable.

Whenever the commission shall find, after hearing, that any rules, regulations, measurements or the standard thereof, practices, acts or services or any such gas company, electrical company or water company are unjust, unreasonable, improper, insufficient, inefficient, or inadequate, or that any service which may be reasonably demanded is not furnished, the commission shall fix the reasonable rules, regulations, measurements or the standard thereof, practices, acts or service to be thereafter furnished, imposed, observed and followed, and shall fix the same by order, or rule, as hereinafter provided.

SEC. 77. *Inspection of books, papers, and documents.*—The commission and each commissioner, or any person employed by the commission, shall have the right, at any and all times, to inspect the accounts, books, papers, and documents of any public service company, and the commission or any commissioner may examine, under oath, any officer, agent, or employee of such public service company in relation thereto and with reference to the affairs of such company: *Provided*, That any person other than a commissioner who shall make any such demand shall produce his authority from the commission to make such inspection.

SEC. 78. *Reports.*—Every public service company shall annually furnish to the commission a report in such form as the commission may require and shall specifically answer all questions propounded to it by the commission upon or concerning which the commission may need information.

Such annual reports shall show in detail the amount of capital stock issued, the amounts paid therefor, and the manner of payment for same; the dividends paid, the surplus fund, if any, and the number of stockholders; the funded and floating debts and the interest paid thereon; the cost and value of the company's property, franchises, and equipment; the number of employees and the salaries paid each class; the accidents to passengers, employees, and other persons and the cost thereof; the amounts expended for improvements each year, how expended, and the character of such improvements; the earnings or receipts from each franchise or business and from all sources; the proportion thereof carried from business moving wholly within the State and the proportion earned from interstate traffic; the nature of the traffic movement showing the percentage of the ton-miles each class of commodity bears to the total ton mileage; the operating and other expenses, and the proportion of such expenses incurred in transacting business wholly within the State, and the proportion incurred in transacting interstate business, such division to be shown according to such rules of division as the commission may prescribe; the balances of profit and loss and a complete exhibit of the financial operations of the carrier each year, including an annual balance sheet.

Such report shall also contain such information in relation to rates, charges, or regulations concerning fares, charges, or freights, or agreements, arrangements or contracts affecting the same as the commission may require; and the commission may in its discretion, for the purpose of enabling it the better to carry out the provisions of this act, prescribe the period of time within which all public-service companies subject to the provisions of this act shall have, as near as may be, a uniform system of accounts and the manner in which such accounts shall be kept. Such detailed report shall contain all the required statistics for the period of 12 months ending on the last day of any particular month prescribed by the commission for any public-service company. Such reports shall be made out under oath and filed with the commission at the office in Olympia within three months after the close of the designated year for which such report is made unless additional time be granted in any case by the commission. The commission shall have authority to require any public-service company to file monthly reports of earnings and expenses and to file periodical or special, or both periodical and special, reports concerning any matter about which the commission is authorized or required by this or any other law, to inquire into or keep itself informed about, or which it is required to enforce, such periodical or special reports to be made under oath whenever the commission so requires.

The commission may, in its discretion, prescribe the forms of any and all such accounts, records and memoranda to be kept by public service companies, including the accounts, records and memoranda of the movement of traffic, sales of its product, the receipts and expenditures of money. The commission shall at all times have access to all accounts, records and memoranda kept by public service companies, and may employ special agents or examiners who shall have power to administer oaths and authority, under the order of the commission, to examine witnesses and to inspect and examine any and all accounts, records and memoranda kept by such companies. The commission may, in its discretion, prescribe the forms of any and all reports, accounts, records, and memoranda to be furnished and kept by any public service company whose line or lines extend beyond the limits of the State, which are operated partly within and partly without the State, so that the same shall show any information required by the commission concerning the traffic movement, receipts and expenditures appertaining to those parts of the line within the State.

SEC. [illegible]

[illegible]

State, at such time and place as it may designate, of any books, records, or documents kept by such company without the State.

The commission may require from any public service company the production of any books, records, or documents kept by such company in any office or place without the State of Washington. Such demand shall be served upon the public service company in the manner provided for the service of orders herein. Such public service company shall have the right to appear before the commission and show cause, if any there be, why such order should not be complied with and such order shall be made after such hearing as the commission may deem proper.

SEC. 84. *Remunerative charges can not be changed.*—Whenever the commission shall find, after hearing had upon its own motion or upon complaint as herein provided, that any rate, toll, rental, or charge with has been the subject of complaint and inquiry is sufficiently remunerative to the public service company affected thereby, it may order that such rate, toll, rental, or charge shall not be changed, altered, abrogated, or discontinued, nor shall there be any change in the classification which will change or alter such rate, toll, rental, or charge without first obtaining the consent of the commission authorizing such change to be made.

STATE OF COLORADO, EXECUTIVE OFFICE,
Denver, April 14, 1914.

Hon. WESLEY L. JONES,
United States Senate, Washington, D. C.

MY DEAR SENATOR: It has been reported to me that the resolution, pertaining to the water powers of the West, unanimously adopted by the Western Governors' Conference, in session in Denver April 7 to 11, was omitted from the eastern press reports. Inasmuch as this was one of the most important of the resolutions adopted by the conference and one in which great interest was taken, I give you below a copy of the same for your information:

"Whereas, Congress has declared 'The water of all lakes, rivers, and other sources of water supply, upon the public lands and not navigable, shall remain and be held free for the appropriation and use of the public for irrigation, mining, and manufacturing purposes,' we insist the Federal Government has no lawful authority to exercise control over the water of a State through ownership of public lands.

"We maintain the waters of a State belong to the people of the State, and that the States should be left free to develop water-power possibilities, and should receive fully the revenues and other benefits derived from such development."

Yours, very truly,

E. M. AMMONS,
Secretary Western Governors' Conference.

DEPARTMENT OF THE INTERIOR,
Washington, February 27, 1914.

Hon. W. L. JONES,
United States Senate.

MY DEAR SENATOR: I have your letter of February 17, 1914, asking to be furnished with information as to causes which may have led this department to revoke water-power permits issued under the act of February 15, 1901 (31 Stat., 790), together with a list containing the names of permittees and location of works under permits so revoked.

In reply I have to advise you that from examination of the records of this department 25 permits issued under authority of the acts of May 14, 1896 (29 Stat., 120), and February 15, 1901, supra, appear to have been revoked by joint action of the Secretary of Agriculture and the Secretary of the Interior March 2, 1909, all of said rights of way being located within the limits of national forests.

I inclose a list containing the names of permittees, date of permit, and name of forest wherein situated. I also inclose copy of memorandum dated February 27, 1909, and copy of the decision rendered in the case of the Mentone Power Co., which papers set forth the reasons for the action taken. Similar decisions to that in the Mentone permit were promulgated in the other cases described. If other permits have been revoked, same have not been called to my attention and were not found in the search involved in replying to your communication.

In conclusion, I direct your attention to the fact that the act of February 15, 1901, supra, expressly provides "that any permission given by the Secretary of the Interior under the provisions of this act may be revoked by him or his successor in his discretion and shall not be held to confer any right or easement or interest in, to, or over any public land, reservation, or park."

Each permit now issued by this department under said act contains a specific reference to this provision of the law.

Very truly, yours,

A. A. JONES,
First Assistant Secretary.

DEPARTMENT OF THE INTERIOR,
Washington, February 27, 1909.

MEMORANDUM REGARDING REVOCATION OF PERMITS FOR POWER PURPOSES.

With regard to permits for power purposes issued under the act of May 14, 1896, it has been decided that the Department of Agriculture will issue a regulation providing in effect that within a certain number of months after notice from the Forester permits under the act of 1896 within a national forest will be revoked. If the permittee prior to said date of revocation shall have accepted a new permit under the act of February 15, 1901, in accordance with the conditions required by the Forest Service, then the revocation shall take effect at the date of the new permit.

As to all permits under the act of February 15, 1901, under which works have been constructed or partially constructed, for which works no subsequent permit has been issued by the Department of Agriculture, revocation shall be made at once, to take effect July 1, 1909. If the permittee prior to said date of revocation shall have accepted a new permit under the act of February 15, 1901, in accordance with the conditions required by the Forest Service, then the revocation shall take effect at the date of the new permit.

As to permits under the act of February 15, 1901, where no work has been done or where the permittee has accepted the new permit issued by the Department of Agriculture, the permits are revoked absolutely.

GARFIELD.

DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., March 2, 1909.

The FORESTER,
Forest Service, Washington, D. C.

SIR: On May 7, 1904, the Secretary of the Interior made the following indorsement on "Amended Map No. 2 of Mountain Power Co.'s Plant No. 2," executed on August 19, 1903, by F. C. Finkle, chief engineer; and filed in the United States land office at Los Angeles, Cal., on March 23, 1903, by the Mountain Power Co., applicant:

"DEPARTMENT OF THE INTERIOR,
"*May 7, 1904.*

"The use of the right of way for the conduit line shown on this map is hereby permitted in accordance with the provisions of the act of February 15, 1901 (31 Stat., 790), and the regulations, present and future, thereunder.

"E. A. HITCHCOCK, *Secretary.*"

All of said right of way is within the Angeles National Forest.

The act of February 15, 1901, does not affect the surveying of, or passage of title, to lands. The act provides:

"That any permission given by the Secretary of the Interior under the provisions of this act may be revoked by him or his successor in his discretion, and shall not be held to confer any right, or easement, or interest in, to, or over any public land, reservation, or park."

The act of February 1, 1905 (33 Stat., 628), provides (sec. 1):

"The Secretary of the Department of Agriculture shall, from and after the passage of this act, execute or cause to be executed all laws affecting public lands heretofore or hereafter reserved under the provisions of section twenty-four of the act entitled 'An act to repeal the timber-culture laws, and for other purposes,' approved March third, eighteen hundred and ninety-one, and acts supplemental to and amendatory

thereof, after such lands have been so reserved, excepting such laws as affect the surveying, prospecting, locating, appropriating, entering, relinquishing, reconveying, certifying, or patenting of any such lands."

Therefore the Secretary of Agriculture has sole jurisdiction to administer the act of February 15, 1901, in national forests and may, in his discretion, revoke any permits issued under that act.

The said permit issued by the Secretary of the Interior authorized the use of said right of way for storing, conducting, and using water for the generation of electric energy, and the right of way is now so used by the Mentone Power Co.

The said permit issued by the Secretary of the Interior does not require the permittee to make any payments to the United States in consideration for such use of the right of way, and contains no mention of any charge. It is the policy and uniform practice of the Department of Agriculture in issuing permits for the use of national forest lands for storing, conducting, and using water for the generation of electric energy for sale to require the permittees to pay to the United States reasonable construction and operation charges in consideration for such use. It is the policy and practice of the Department of Agriculture also to place all like users of national forest lands on a uniform basis in respect to the conditions and requirements under which they shall enjoy such uses.

Under the said established policy and practice it is advisable that the said permit issued by the Secretary of the Interior be revoked and that the Mentone Power Co. be required to secure a new permit, in the form of a special-use agreement, from the Department of Agriculture. Accordingly, in the exercise of my discretion and the authority in me vested by the act of February 15, 1901, and the act of February 1, 1905, I hereby revoke the said permit issued by the Secretary of the Interior on May 7, 1904.

You are hereby instructed to communicate with the Mentone Power Co. with a view to the issuance of a special-use permit for such use of said right of way. Pending the settlement of the terms of a permit for this purpose and a reasonable time thereafter for the execution of the same, the occupancy and use of the lands for the purposes covered by the revoked permit should not be disturbed or interfered with.

In settling the terms of the new permit for such occupancy and use, due weight should be given for investments made on the faith of the revoked permit. In cases where there has been full investment and development the operation charge imposed by the new permit for the first twenty-five years should be nominal. You should, therefore, in such cases calculate the gross operation charge at a rate not to exceed two (2) cents per thousand KWH during this period and make the usual reductions for alienated and unreserved lands and for water storage. From the twenty-sixth year the gross operation charge should be calculated at the maximum rates prescribed for the first to the twenty-fifth years in the standard form of permit for new projects.

You are hereby further instructed to serve notice of the decision and these instructions upon the Mountain Power Company and the Mentone Power Company, and to secure return, hereon, of such service.

Very respectfully,

JAMES WILSON,
Secretary of Agriculture.

DEPARTMENT OF THE INTERIOR,
March 2, 1909.

I approve and concur in the above revocation.

JAMES RUDOLF GARFIELD,
Secretary of the Interior.

Service of the above decision is hereby admitted this ..... day of ....., 1909.

LIST OF CASES IN WHICH DECISIONS OF MARCH 2, 1909, REVOKED PERMITS ISSUED BY SECRETARY OF INTERIOR UNDER ACT OF FEBRUARY 15, 1901.

Zombro, Colliver, Angeles. Power location and canal. October 23, 1899. (1 decision.)

Mentone Power Co., Angeles. Power house and conduit. November 24, 1903. (1 decision.)

Sperry, E. A., and W. L. Arapaho. Virginia reservoir and pipe line. August 17, 1908. (1 decision.)

Telluride Power Co. Cache. Reservoir and flume. December 3, 1903. (1 decision.)

Clarkin, C. M. Crook and Tonto. Power project. February 9, 1909. (7 decisions.)

Industrial Investment Corporation, Holy Cross. (1 decision.)

Grand River Power & Transmission Co. Holy Cross. Pipe line. August 17, 1908. (1 decision.)
Central Colorado Power Co. Holy Cross. De Remer Canal, pipe line, and power station. August 17, 1908. (1 decision.)
Glenwood Light & Power Co. Holy Cross. Tunnel and pipe line. August 1908. (1 decision.)
Nevada-California Power Co. Inyo. Equalizing reservoir and pipe line. December 8, 1906. (1 decision.)
Henshaw, Park. Lassen. Dam and conduit. July 10, 1906. (1 decision.)
Cottonwood Light & Power Co. Leadville. Pipe line. August 17, 1908. (1 decision.)
Smith and Sanborn. Medicine Bow. Bierstadt Lake Reservoir. Inlet d and pipe line. August 17, 1908. (1 decision.)
Pikes Peak Hydro-Electric Co. Pike. Pipe line. August 17, 1908. (1 decision.)
Kern River Co. Santa Barbara. Transmission line. June 29, 1904. (1 decision.)
Wishon, A. G. Sequoia. Power station and conduits. January 19, 1905. (1 decision.)
NOTE.—See about revoking permit in case (on closed files) designated Wishon, A. G. Transmission line, April 25, 1903.
Wishon, A. G. Sequoia. Conduit. August 17, 1908. (1 decision.)
Mount Whitney Power Co. Sequoia. Reservoir, conduit, and road. August 1908. (1 decision.) Took new permit.
Eastwood, John S. Sierra. Permanent power plant. October 8, 1906. (5 decisions.) Abandoned.
Wishon, A. G. Sierra. Reservoir, conduit, and power-house site. May 3, 1907. (5 decisions.) Took new permit.
Knight, Geo. A. Sierra. Flumes and tunnels. May 3, 1902. (1 decision.)
Mammoth Power Co. Sierra. Reservoir, conduit, and power plant. March 1903. (1 decision.) Abandoned.
Stanislaus Electric Power Co. Stanislaus. Reservoirs and conduit. February 1909. (1 decision.) Superseded by new permit to new company.
Wilke, Gustav. Uncompahgre. Planet pipe line and reservoir. August 17, 1908. (1 decision.) Superseded by new permit to another party.
Oregon Electric Power Co. Wallowa. Power development No. 1. August 17, 1908. (1 decision.) Abandoned.

(Thereupon, at 12 o'clock noon, the committee adjourned.)

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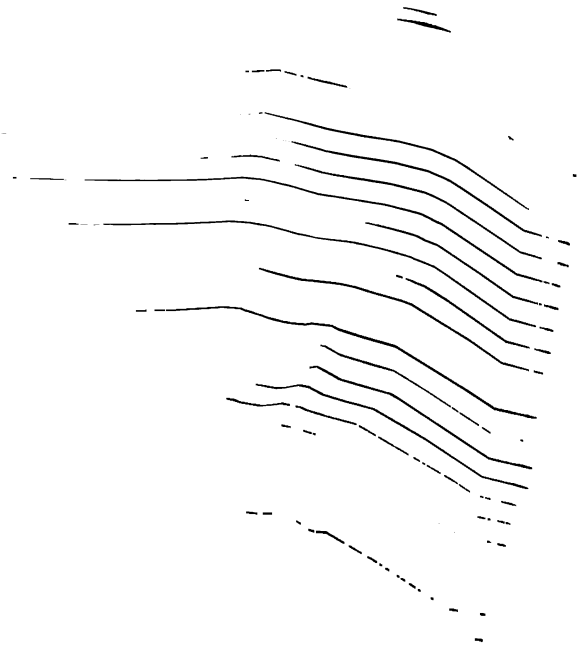

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